The World-Wide Evidence Based Practice Agenda

Proof, Power, Prestige & Cash

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Global Evidence-Based Practice Strategies
Objectives

1. Describe the roots of evidence based practice (EBP) and the impact on culture & health care

2. Identify five sure pathways for ethical evidence based practice using the ANA Code of Ethics.
Evidence Based Practice (EBP)

...a problem solving approach to clinical care using the best evidence from well designed studies, clinician expertise, and patient values and preferences......provided in a context of caring, EBP leads to the best clinical decision making and outcomes for patients and families....

Origins of EBP

• Archie Cochrane – Pioneer Evidence Based Medicine (EBM)- 1979
• Rise of the information age
• Shift from opinion, experience, precedent to science & evidence to guide clinical decisions.

Evidence Based Medicine

• Successfully brought the benefits of research to large populations
• Significant reductions in mortality & morbidity in disease & treatment
• “Replaced” expert, experience & pathophysiological relationship based medicine.
• A powerful pathway for nearly all drug development & application over the past 60 years.


Change of Emphasis
Nurse Knowing

• Empirical
• Ethical
• Personal
• Aesthetic

Myths of EBP

- Solves problems quickly
- Safest option
- Best value for the money
- Interventions & outcomes are measurable
- Best path to solve clinical problems
- A simple, logical process for critical thinking & decision making.


Evidence Base for 3000 Interventions


![Bar chart showing the percentage distribution of interventions by effectiveness.]

- Beneficial: 11%
- Likely Beneficial: 23%
- Beneficial/Harmful: 7%
- Unlikely helpful: 5%
- Likely Harmful: 3%
- Unknown effectiveness: 51%
Criticisms of EBP

1. Many question in nursing cannot be answered via experimental design.
2. Nursing requires a wide range of evidence not obtainable from RCT.
3. EBP does not account for the nature of healing.
4. Patients are not biological machines.
5. Evidence is never free of prejudice or error.
6. Interventions based on probabilities without accounting for circumstances, pathophysiology, physiology & history is dangerous care.


Criticisms of EBP

7. Association does **not** mean causation.
8. Precision is **not** validity.
9. The usefulness of any evidence is equal to:
   
   `relevance \times validity`

   work & resources & benefit

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Hidden Outcomes of EBP

• “Medicalization” of life
• Evidence perceived as truth & use is quality care
• Condition + Intervention= Outcome (<.05)
• Nurse/Patient relationship changed to Provider/Consumer
• Decreasing confidence in provider judgment
• Less toleration of error, adverse & unpredicted natural biological variation

Barriers to EBP

• HCO lack dynamic systems & access to disseminate evidence
• Significant numbers of clinical nurses lack competency to **synthesize & evaluate & judge** evidence for clinical problems *(application is not the problem!)*
• Applied evidence within order sets, policies, procedures & clinical guidelines is **poorly structured** & discourages nurses to **think through** the consequences of applying evidence.


Erosion of Truth & Trust Since 2001

Number of retracted papers has increased 15 fold

Naik G. Mistakes in Scientific Studies
Surge. WSJ.com. August 10, 2011
Increasing Erosion of Truth & Trust in Science

Andrew Wakefield
Naoyuki Nakao
Naik G. Mistakes in Scientific Studies Surge.  
WSJ.com. August 10, 2011

Scott Reuben
O’Malley P. A Case of Scientific Misconduct.  

Hwang Woo Suk
Jan Hendrikschon
Jon Sudbo
Eric Poehlman
There is probably a lot of undiscovered fraudulent research.

Dark Side of EBP

How to Achieve positive Results without actually Lying to Overcome the Truth [Harlot]


Fabrication, Falsification, Plagiarism [FFP]

Questionable Practices

- Report only the impressive relative risk reduction while *suppressing* the *unimpressive* absolute risk reduction & actual numbers needed to treat.
- Provide experimental patients *additional treatments* with known efficacy to treat co-morbidities & improve study results
- **Concoct** invalid inflated event rates especially among control patients

*D.Sackett & A. Oxman. HARLOTplc: an amalgamation of the world’s oldest professions. BMJ. 2003;327:1442.*

Dark Side EBP

- **SAFE**- Say anything for money (paid experts to generate guidelines, write editorials, be keynote speakers, referee for key journals)

- **SCUM**- Sick Celebrities for Use in the Media (Hire stars, athletes and washed out politicians for talk shows, gossip magazines, to promote the product)


Dark Side EBP

- **FYP** - Foundation in Your Pocket (build beautiful headquarters & conference centers for health foundations)
- **BOSS** - Bureau of Secret Surveillance (buy confidential information from pharmacists to know who is prescribing what)
- **SOW** - Save/Sacrifice Our Workers (threaten to move the product development & production to another country)

Dark Side EBP

- **SHARKS** – Striking Horror and Retreat through Killer Solicitors (Really good lawyers to threaten drug review boards with frivolous but expensive lawsuits to suppress negative health technology assessment till sales targets are met)


Dark Side EBP

**SALAMI**-how to Succeed in Academic Life Advice and Mentoring Institute (*how to pad your vitae, exploit your staffs and slice your research findings into a minimum of one paper published per enrolled subject*). Always overstate the significance of the findings.


Dark Side EBP

RATS- Research Administration Teams

1. Find patients that can survive the immediate toxicity of the drug before inclusion in analysis.

2. If a significant number of patients are experiencing negative events, these outcomes will be excluded from analysis.


Dark Side EBP

GSWS - Ghost Writers in the Sky

• Once the data is “cooked”, write the paper and report only favorable results.
• Randomize sentence presentation to camouflage plagiarism
• Bury unfavorable results since patients, clinicians, regulators and the public can’t be hurt by what they don’t know.

Future EBP

Statistics can say whatever you want but not necessarily WHY?
Improving EBP for the Future

1. Provide evidence of ethical research processes (COI & bias)
2. Eliminate unnecessary research
3. Education & training in **READING, INTERPRETING, JUDGING & APPLYING** evidence
4. Prospective agreement for publication regardless of findings to stop data concealment
5. Reduce emphasis for volume (# of projects) over quality (adherence to ethics & standards)
6. Stop unconditional acceptance of evidence


Perspectives

• There is no evidence that EBM provides a greater benefit than traditional care.

• The replacement traditional care with evidence application based on favorable meta-analysis as the final arbitrator has created new legal, ethical and governmental powers that overshadow practice & has created new consumer needs.

Perspectives

• EBP as the primary model to **quantify, cost, govern** and **evaluate** care renders the clinician-patient relationship into a “thing” stripped of all **therapeutic power** & along with the dynamics of **healing** & **meaning**.

• Patient **outcomes** are becoming a function of **enacted probabilities** rather than the result of expert & compassionate nursing care.

• The “**supermarket**” of best evidence for sale – the public increasingly is being **led** that healing can occur outside the clinician-patient relationship.

What if?

Health care was liber*ated* from probability based statistics which leads to incorrect diagnosis, the wrong evidence application and increased need for testing to refute or confirm “successful” evidence application?

Maybe?

- Evidence is a **tool** that requires judgment & assessment **before** application.
- Since nursing is a human interaction with potentially infinite responses, RCT should **not** be perceived as the GOLD standard for evidence.
- No one type of evidence should secure a position of **domination** over another.
- A more uniform & transparent process to evaluate evidence would help nurses and HCO to understand the **limitations** of EBP.
- Guidelines are **not rules**
- All guidelines are **evidence** based, **opinion** based and **bias** based.


Evidence Based Practice is a gift with ethical wrappings

Nursing’s Treasures to Navigate EBP

• ANA Code of Ethics
• 5 Nursing Ethics
  • Autonomy
  • Beneficence
  • Non-malfeasance
  • Justice
  • Veracity

Case study  
*Tobin MJ. Counterpoint: evidence based medicine lacks a sound scientific base.*  
*Chest. 2008; 133(5): 1071-1074*
Conclusions

• Evidence based nursing practice must be based first on knowing*, nursing assessment, then competency, experience & intuition.

• Use of evidence is a function of patient & nurse autonomy influenced by resources and circumstances, values and goals.

• Evidence based nursing practice takes place in relationship supported by the ANA Code of Ethics.

*Knowing: Anatomy, physiology, pathophysiology, pharmacology, microbiology, & evidence evaluation, aesthetics & personal knowledge
Questions?

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