

Igniting Evidence-Based Practice in Healthcare Education

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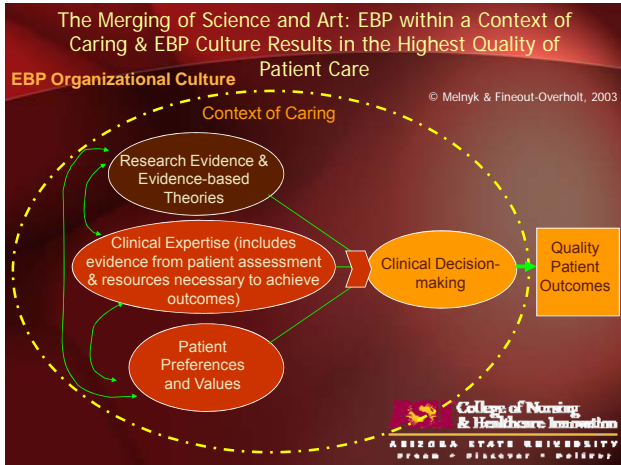
In God We Trust, Everyone Else Must Bring Data!



Evidence-Based Practice

Evidence-based practice (EBP) is a problem solving approach to clinical practice that integrates the conscientious use of best evidence in combination with a clinician's expertise as well as patient preferences and values to make decisions about the type of care that is provided. Resources must be considered in the decision-making process as well.





An Example of When Patient Preferences “Trump” the Best Evidence

A *New York Times* article entitled
 “When Doctors Say Don’t and the Patient Says Do”
 (Siegel, October 29, 2002).

The slide features a title in yellow and white text on a dark red background. Below the title is a quote from a *New York Times* article. A small cartoon illustration shows a doctor in a white coat sitting at a desk with a computer, talking to a patient. The logo for the College of Nursing & Healthcare Innovation at Arizona State University is at the bottom right.

An Example of When Patient Preferences “Trump” the Best Evidence

“You see, we patients are not just statistics.
 We don’t always behave the way studies
 predict we will.”

The slide features a title in yellow and white text on a dark red background. Below the title is a quote in white text. The logo for the College of Nursing & Healthcare Innovation at Arizona State University is at the bottom right.

Acting on the Evidence

- Strength of the Evidence + Quality of the Evidence = Confidence to Act!



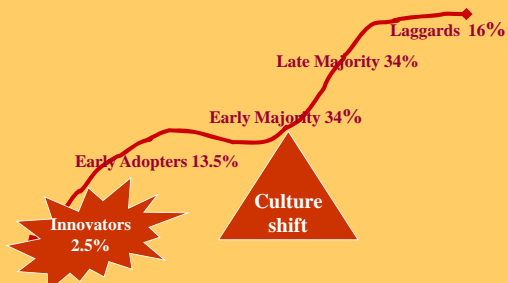
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Critical Components of an EBP Culture

- **A Spirit of Inquiry:** all health professionals are encouraged to question their current practices
- **A Cadre of EBP Mentors:** who have in depth knowledge and skills in EBP, mentoring others, and overcoming barriers to organizational change
- **EBP Champions:** Direct care providers who are excited about EBP
- **Infrastructure:** tools that enhance EBP, including computers for searching at point of care and up to date data bases
- **Administrative Support:** leaders who value and model EBP as well as provide the needed resources to sustain it
- **Recognition:** individuals and units are rewarded regularly for EBP

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Diffusion of Innovation



The Keys to Improving Healthcare

- Advances in EBP, which identify and implement the clinical practices that lead to the best care (the content of providing care)
- Knowledge of how to put the content into routine practice

Shortell, Rundall & Hsu, 2007



Recommendations from Knowing What Works in Health Care? A Road Map for the Nation (IOM, 2008)

Congress should direct the secretary of the U.S. Department of Health and Human Services (DHHS) to designate a single entity (the Program) with authority, overarching responsibility, sustained resources, and adequate capacity to ensure production of credible, unbiased information about what is known and not known about clinical effectiveness



The IOM Roundtable on EBM

- Formed in response to the 2003 IOM's Committee on the Health Professions Education Summit recommendation that

All healthcare professionals will be educated to deliver patient-centric care as members of an inter-disciplinary team, **emphasizing EBP**, quality improvement approaches and informatics

- **Ninety percent of healthcare decisions will be evidence-based by 2020**

- The IOM Roundtable on EBP



The U.S. Preventive Services Task Force

- Goal: To provide clinicians, policy-makers, and the public with reliable and accurate evidence-based recommendations on clinical preventive services
- The task force considers the following in making its recommendations
 - potential preventable burden
 - potential harms
 - costs
 - current practice



The National Consortium for Pediatric and Adolescent EBP (NCPAEP)

- Launched in 2007 during an EBP Leadership Summit, funded by the Agency for Healthcare Research and Quality (AHRQ)
- Vision: a leading organization for pediatric and adolescent EBP
- Mission: To promote interdisciplinary EBP and collaborative research for improving child and adolescent health outcomes across the care continuum




Why Must We Accelerate EBP?

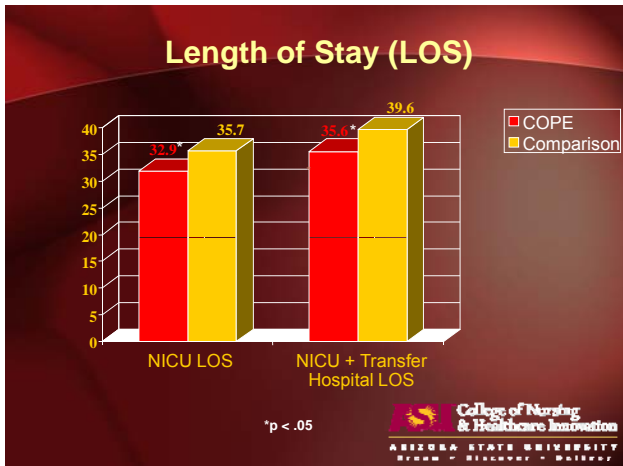
- Despite an aggressive research movement, the majority of findings from research often are not integrated into practice
- It takes approximately 17 years to translate research findings into practice

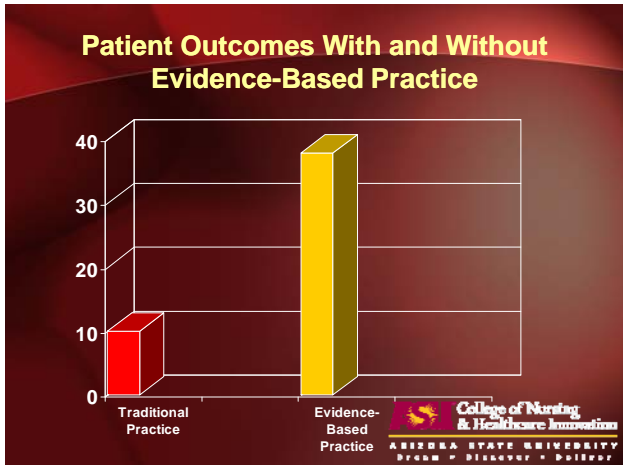


COPE: Creating Opportunities for Parent Empowerment
An Evidence-Based Program to Improve Outcomes in Critically Ill/Hospitalized Young Children, LBW Premature Infants & Parents



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Pay for Performance

- Added incentives/payment are being provided to hospitals and healthcare institutions that follow evidence-based practices/guidelines

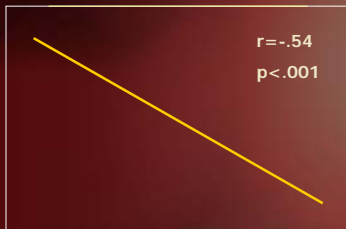


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Why Must We Accelerate EBP?

The Slippery Slope

Knowledge of Best Current Care for Hypertensive Patients



Years since Medical School Graduation

From: Shin et al (1993), CMAJ, 69

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Why Must We Accelerate EBP?

- A high JASPA score
(Journal of Associated Score of Personal Angst)

J: Are you ambivalent about renewing your Journal subscriptions?

A: Do you feel Anger toward prolific authors?

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Why Must We Accelerate EBP?

S: Do you ever use journals to help you Sleep?

P: Are you surrounded by piles of Periodicals?

A: Do you feel Anxious when your journals arrive?



Modified from BMJ (1995), 311, 166-1668





In order to keep up with the journals relevant to our practice, we need to review 19 articles a day, 365 days of the year!!!

-Brian Hayes



Why Must We Accelerate EBP?

- Practices rooted in tradition are often outdated and do not lead to the best patient outcomes.
 - ❖ Daily changing of IV dressings
 - ❖ Perineal shaves before child birth
 - ❖ Mayonnaise for head lice
 - ❖ Albuteral delivery with nebulizers



The Steps of EBP

- 0. Cultivate a spirit of inquiry and EBP Culture
- 1. Ask the burning clinical question in PICO format
 - Patient population
 - Intervention or interest
 - Comparison intervention or group
 - Outcome

In parents with hospitalized children (P), is education about their parental role (I) versus education and skills building about their parent role (C) more effective in enhancing participating in their children's care?



The Steps of EBP

- 2. Collect the best evidence. Search first for systematic reviews (e.g., the Cochrane Database of Systematic Reviews) and evidence-based clinical practice guidelines (www.guideline.gov)



Rating System for Levels of Evidence (from Melnyk & Fineout-Overholt, 2005)

- Level I:** Evidence from a systematic review or metaanalysis of all relevant randomized controlled trials or evidence-based clinical practice guidelines based on systematic reviews of RCTs
- Level II:** Evidence obtained from at least one properly designed randomized controlled trial
- Level III:** Evidence obtained from well-designed controlled trials without randomization
- Level IV:** Evidence obtained from well designed case control and cohort studies



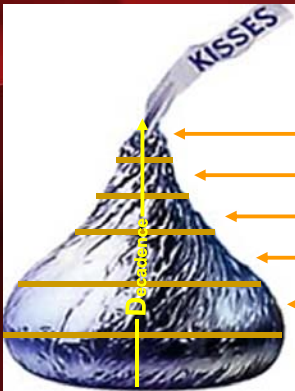
Rating System for Levels of Evidence

- Level V:** Evidence from systematic reviews of descriptive and qualitative studies
- Level VI:** Evidence from a single descriptive or qualitative study
- Level VII:** Evidence from opinion of authorities and/or reports of expert committees

Modified from: Guyatt & Rennie, 2002 and Harris et al., 2001



Levels of... Chocolate



- ← Godiva Truffles
- ← Donnelly Chocolates
- ← Ghirardelli Chocolate Bars
- ← Hershey Kisses
- ← Fannie Farmer Sampler
- ← Nestle's Quik

*"Inspirational quotes are fine, but you'll motivate more people with chocolate."
-Ellen Fineout-Overholt*




The Steps of EBP

3. Critically appraise the evidence using rapid appraisal techniques
 - a. Are the results valid (as close to the truth as possible)?
 - b. What were the results and are the findings important (reliable)?
 - c. Are the findings clinically relevant to my patients?



The Steps of EBP


4. Integrate evidence, clinical expertise, and patient factors/preferences to implement best practice
5. Evaluate the outcomes to demonstrate impact



Why Measure the Outcomes of EBP?

Outcomes reflect IMPACT!

- *EBP's effect on patients*
 - ❖ Physiologic (complication reduction; health improvement)
 - ❖ Psychosocial (quality of life; depressive and anxiety symptoms; patient satisfaction with care)
 - ❖ Functional improvement
- *EBP's effect on the health system*
 - ❖ Decreased cost, length of stay
 - ❖ Nursing retention / job satisfaction
 - ❖ Interdisciplinary collaboration



Major Barriers to the Advancement of EBP

- Low comfort level with search techniques
- Perceived lack of time
- Challenges with critically appraising research
- Lack of organizational/administrative support
- Educational programs that continue to teach research the "traditional way" with a focus on producing instead of using evidence
- Negative attitudes toward research
- Colleagues who are negative



Evidence-Based Facilitators of EBP

- Individual knowledge and skills of EBP
- Beliefs that EBP improves care and outcomes
- Beliefs in the ability to implement EBP
- Mentor(s)/teachers who are skilled in EBP
- Administrative/organizational support
- Champions
- Technology



Igniting and Sustaining System-Wide Change to EBP in Clinical Settings

Anything is possible with a big dream, belief and persistence!



A Major Key to System-Wide Change

A Vision/Dream with Specific Written Goals



Walt Disney had a Big Vision



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The Next 5 Years

What could you do if you know that you would not fail?

What is the smallest change that you can make in your practice that will have the biggest impact?

Shoot for the moon, even if you miss, you will hit the stars—Les Brown

There Is A Magic In Thinking Big!



Persistence is Key!

There will be "character-building" experiences along the way!



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Plant your seeds, nurture them, and don't give up before they grow!



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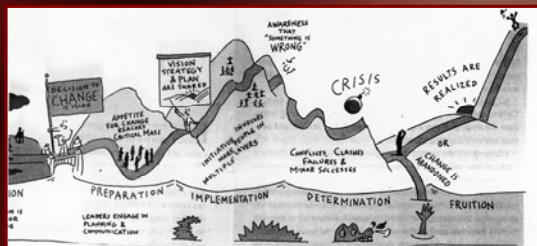
A Model of Organization Change

"The Change Curve Model"

Jeanie Daniel Duck

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Knowing what to expect as part of the change process will enhance success!



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SHOCK!

“You are asking me to implement EBP on top of everything else that I do?”



Stressed!



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Change Fatigue



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Recommendations for Igniting EBP in Clinical Settings

Ask yourself the following questions

- To what extent is the education that I deliver evidence-based?
- How much do I believe that implementing and teaching EB education will lead to the highest quality of care for patients and their families?
- How much knowledge of the EBP process do I possess?



Recommendations for Advancing EBP

Assess the Culture for Evidence-based Practice/Education

- Does the philosophy, mission and values of the institution support EB practice/education?
- What is the personal commitment to EB practice/education among leaders/administrators and educators?
- Are there EBP mentors who have strong knowledge and skills related to EB practice/education?



Recommendations for Advancing EBP

Assess the Culture for Evidence-based Practice/Education

- Do advanced practice clinicians/educators model EB practice/education?
- Do learners have resources (e.g., access to quality computers *at the point of care?*)
- Are there librarians who have knowledge of EBP who can assist with EBP?
- Are there champions for EB practice/education at all levels?



Practical Strategies for Teaching EBP

- Keep it simple and fun
- Use small groups whenever possible (<10)
- Start with a good example that is meaningful/clinically relevant to the group
- Use PICO question boxes in clinical areas
- Use visual triggers of EBP
- De-emphasize statistics



Practical Strategies for Teaching EBP

EB Practice/Education Rounds

Includes:

- Presentation of the problem
- PICO clinical question
- Search strategy and evidence found
- Critical appraisal of the evidence
- Clinical application



Journal Clubs

- Success Indicators:
 - ❖ Homogeneous learners
 - ❖ Have basic didactic exchange to even the playing field
 - ❖ Have food
 - ❖ Start with basic, original single studies
 - ❖ Select relevant research
 - ❖ Don't be too ambitious



Practical Strategies for Advancing EBP

- Skills Building Workshops (Basic and On-Going)
- Online EBP Modules and Discussion Groups
- EBP Fellowship and Sabbatical Programs
- "Wisdom Wagon" (A traveling EBP Poster-SUNY Upstate Medical Center in Syracuse)



Key Strategies for Sustaining EBP

- Set EBP as an institutional expectation and build it into the vision, mission and strategic plan of the organization as well as in staff evaluations, competencies and promotion ladder
- Incorporate EBP guidelines and practice changes into policies and procedures, including the level of evidence for each practice recommendation
- Develop a cadre of EBP mentors to work regularly with clinicians/educators at point of care



Key Strategies for Sustaining EBP

- Develop a cadre of EB practice/education champions throughout the organization
- Provide library and internet resources for the direct care staff at the point of care
- Establish strong collaborations
- Increase the number of master's prepared clinicians/educators



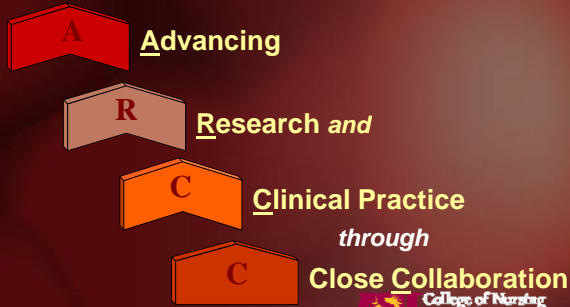
Key Strategies for Sustaining EBP

- Include EBP as part of every new clinician's/educator's orientation
- Provide ongoing continuing education on EBP that includes knowledge and skills building
- Hold regular EBP rounds and journal clubs
- Disseminate results of EBP implementation projects
- Provide resources, including time and technology
- Recognize and reward EBP initiatives



The ARCC Model

Copyright, Melnyk & Fineout-Overholt (1999)



Melnyk & Fineout-Overholt's ARCC Model



The Generation of High Quality Evidence is Absolutely Necessary for Evidence-Based Practice/Education to Advance

We Must Become an
"Evidence-Seeking" Profession

-D. Rothenberger

All educators can gather evidence to guide their teaching



EBP Resources: Conferences and Workshops

- Arizona State University College of Nursing Center for the Advancement of EBP
<http://nursing.asu.edu/>; click on evidence-based practice

-Ongoing 5 day immersion EBP mentorship workshops throughout the year for clinicians and educators

-Annual national EBP conference (Phoenix, Feb 18-20, 2009)

-17 credit on-line graduate/post-master's certificate in EBP



Bernadette Mazurek
MELNYK
Ellen
FINEOUT-OVERHOLT

EVIDENCE-BASED PRACTICE

in Nursing & Healthcare

A GUIDE TO BEST PRACTICE

With an Important Foreword by the US Surgeon General



? ? ? ? ?

“...because we’ve always done it that way.” ?


? ? ? ? ?

Anonymous



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Nothing Happens Unless First a Dream!- Carl Sandburg



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RAPP 4 EBP

- Evidence-based practice is a wonderful thing
Done with consistency, it makes you sing
- PICO questions and learning search skills
Appraising evidence can give you thrills
- Medline, CINAHL, PsychInfo are fine
But for Level I evidence, Cochrane’s divine!



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RAPP 4 EBP

*Though you may want to practice the same old way
"Oh no, that's not how I will do it" you say*

*When you launch EBP in your practice site
Remember to eat the elephant, bite by bite*

*So dream big and persist in order to achieve and
Know that EBP can be done when you believe!*

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For further information on EBP, the COPE
Programs or to obtain sample copies of the
EBP Beliefs, Implementation, and Culture Scales

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