Knowledge Translation

- the exchange, synthesis and ethically sound application of knowledge
- within a complex system of interactions among researchers and users-
- to accelerate the capture of the benefits

According to Szeben (2003), “… deliberate means where information is diffused with an implementation stratagem to ensure that information is reaching a desired population and subsequently being used in current practices” (p 134)
Knowledge Translation

...scientific study of the methods for closing the knowledge-to-practice gap, and the analysis of barriers and facilitators inherent in this process.


Is knowledge translation really needed?

Journal of Associated Score of Personal Angst

BMJ 1995;311:1666-1668 (23 December)

● Ambivalent about renewing your Journal subscriptions?
● Do you feel Anger toward prolific authors?
● Do you ever use journals to help you Sleep?
● Are you surrounded by piles of Periodicals?
● Do you feel Anxious when your journals arrive?

BMJ 1995;311:1666-1668 (23 December)

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Delays of Evidence into Practice

James Lind (1716 – 1794)

James Lancaster (1551)

Data published 1754
40 years later……….

Delays of Evidence into Practice

Ignatz Semmelweis
1846 puerperal fever

Mortality rate 18% to 1.2%

That Was Then…..
What About Now?

A recent survey with a random sample of 1097 registered nurses in the U.S. indicated that:
• Besides time, the greatest personal barrier in using information in practice was “lack of value for research”
• The greatest organizational barrier to using information in practice was “presence of other goals with a high priority”

Source: Pravikoff, Pierce, & Tanner (2005). Nursing Outlook, 53 (1), 49-50
Conclusion from the AAN Expert Panel Study

RNs in the United States aren't ready for evidence-based practice
- information literacy
- computer skills
- limited access to high quality information resources
- attitudes toward research


Readiness of US Nurses for EBP (Pravikoff et al, AJN, 2005)
Stratified random sample of 3,000 nurses (37% response rate; 51% ADN/Diploma)

Reported Findings
- 39% reported needing info to support care seldom or 1-2X month
- 58% never used a research report
- 82% never used a hospital library
- 57% had a library
- 77% had never had instruction in electronic searches
- 19% confident in using CINAHL; 36% Medline

Research is of little value unless the findings are used in practice to improve care

Schultz, 2006

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Is KT really really needed?

Problems for decision-makers

Volume of scientific findings

Complexity of design


Cochrane Database of Systematic Reviews

http://www.cochrane.org/reviews/impact/cdsrpubgraph1995present.htm

Integration and Simplification

Smoking makes you ugly

World Health Organization

Knowledge Management
Focus: National Policy Makers, WHO Programs and Health Professionals
- Improve access to world's health information
- Translate knowledge into policy and action
- Leverage eHealth in countries

- From blobbogram
  - Relative Risk
  - Number out of 100

Plain Language Summaries

1 min
5 min
15 min

Knowledge Translation Program
Faculty of Medicine - University of Toronto

Founded 2000
Mission:
Develop, test, and implement evidence-based knowledge translation strategies and to bridge the gap between research evidence and practice.

The BLACK Box
### Cochrane Effective Practice and Organisation of Care Group


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### Do I Know What I Do?

**Do I Do What I Know?**

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*Summary of supportive evidence used by Trowbridge & Weingarten Chapter 54 of AHRQ Report*

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### A few words about...

**Beliefs**

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Copyright, Susan B Stillwell, 2007
Nurses’ Perceived Knowledge, Beliefs, Skills, and Needs Regarding EBP: Implications for Accelerating the Paradigm Shift


Findings: Correlations among beliefs, knowledge and EBP

Nurses held strong beliefs that EBP would improve clinical care and patient outcomes \( (r = .32, p = .000) \). Knowledge \( (r = .42, p = .000) \) and beliefs \( (r = .4, p = .000) \) about EBP are related to the extent that nurses engage in EBP. The extent to which nurses’ practices were evidence based were correlated with having a mentor that facilitates EBP \( (r = .21, p = .05) \).
Pilot Testing of the ARCC Model

Fostering EBP in a Community Health Setting

- Major findings:
  - Nurses in the 16 week ARCC intervention program, compared to comparison intervention nurses, had significantly higher beliefs about EBP, higher EBP implementation, and increased group cohesion.
  - Preliminary support of the ARCC model
    - Knowledge alone does not change nurses beliefs about EBP
    - Mentoring and immersion in EBP is essential to facilitate and maintain attitude change

Translating clinicians’ beliefs into implementation interventions (TRACII): a protocol for an intervention modeling experiment to change clinicians’ intentions to implement evidence-based practice


Knowledge Translation

Healthcare systems and individuals adapt and apply best clinical evidence

OUTCOME: patient (individual, family, community, population) is the ultimate recipient of benefits related to closing the gap between evidence and practice

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