The journal club is dead! Long live the evidence based decision making club!

Curriculum Change and Innovation
New York University

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CCI Presentation

History and origins of EBD at NYUCD and the start of the steering committee - Joan

Collaboration with Nursing and the EBP Academy including funding and administrative support and strategic planning - Judi

Nursing Journal Club and Committee Journal Club focusing on article appraisal, Review of available journal club literature - Mary
CCI Presentation

Evolution from traditional journal club to our current Evidence Based Decision Making Club- Andrew

Implemented curriculum changes- Joan

Questions- Audience
History and Origins
How did we get here?
Interprofessional Collaboration

Silvia Spivakovsky OMPRM
Oliver Nicolay Orthodontics
Mary Brennan Nursing
Judith Haber Nursing
Miriam Robbins OMPRM
Joan Phelan OMPRM
Analia Veitz Keenan OMPRM
Maria Dolce Nursing
George Cisneros Orthodontics
Winnie Funari Dental Hygiene
Donna Hallas Nursing
Barbara Krainovich-Miller Nursing
Andrew Schenkel Cariology & Comp Care
Phyllis Slott Basic Sciences
Ivy Peltz Cariology & Comp Care
Mitchell Lipp Orthodontics
Interprofessional Collaboration

Health Professions Education: A Bridge to Quality (IOM, 2003)

Health Professionals Should be Educated to:

• Provide seamless interprofessional care
• Emphasize evidence-based practice
• Deliver patient-centered care
• Apply quality improvement and informatics practices to advance clinical outcomes
Dental-Nursing Strategic Alliance
Knowledge of best hypertension care

Shiri et al, CMAJ, 1993

$r = -0.54$
$p < 0.001$

The slippery slope...

Years since graduation
Information Overload

- Volume
- Relevance
- Acceptability
- Currency
- Access
- Comprehensiveness
- Skills in Finding & Using
NYUCD and NYUCN Strategic Plan

Developing Men and Women of Science

• Prioritize evidence-based practice as a central component of our faculty development plan
  • EBP Academy
  • Lunch and Learns
  • Systematic Review Training
  • EBP Publications and Presentations
The EBP Academy

• NYUCD/NYUCN Faculty Development Program
• Consistent with Strategic Plan
• Supported by Administrative Leadership
• Funded by the Faculty Professional Development Committee
• Planned by the EBP Steering Committee
EBP Academy

• Dental and Nursing collaborative training in evidence-based practice
Beginner, Intermediate, Advanced EBP Training

• How to Conduct a Great Search
• Critical Appraisal of Research Studies
• EBP Statistics
• Systematic Review Training
• EBP Teaching-Learning Tool Kit
• EBP Lunch and Learns
EBP Academy Outcomes 2008-2011

- Trained 400 faculty from NYUCD and NYUCN at EBP beginner and/or intermediate, or advanced levels
- Integrated EBP in dental, dental hygiene and nursing curricula
- Development of Faculty practice scholarship portfolios
- Development of systematic review teams
Developing the Steering Committee Journal Club

We Started with the Evidence!

Mary M. Brennan, DNP, ACNP-BC
New York University
Coordinator of the Acute Care Nurse Practitioner Program
Preparing for the Development of the Steering Committee Journal Club
Searching for the evidence!

**PICO Question:**

Do intra-professional groups who employ journal clubs acquire greater knowledge in evidence-based practice/critical appraisal compared with groups who are not involved in journal clubs?

**P:** Intra-professional groups

**I:** Journal Clubs

**C:** No clubs

**O:** Evidence-based practice/critical appraisal
Literature Search

Intraprofessional AND journal clubs AND critical appraisal

Intraprofessional AND journal clubs AND critical appraisal
Literature Search

Intraprofessional AND journal clubs AND critical appraisal
Literature Search

Intraprofessional AND journal clubs AND critical appraisal

- Sent to all members for critical appraisal
- CASP Tool for Critical Appraisal of Systematic Reviews – Assessing the quality and validity of the systematic review.
  - Focused question?
  - Comprehensive search?
  - Was there a quality appraisal of the included studies?
  - Was it reasonable to combine the studies?
  - Results?
Critical Appraisal Skills Programme (CASP)

1. Did the review ask a clearly focused question?

PICO Question was identified

Population: health practitioners of any discipline

Intervention: any form of journal club

Comparison: any comparator

Outcomes: any outcomes measure relating to journal club effectiveness, including but not limited to knowledge, attitudes, skill acquisition, practice behaviors, and satisfaction
2. Did the review include the right types of studies?

Inclusion criteria
Primary research, health-based, English, available in full-text

Exclusion criteria
Initially searched for any research design
Narrowed → experimental studies; quasi-experimental; pretest-posttest studies
Critical Appraisal Skills Programme (CASP)

3. Did the reviewers try to identify all relevant studies?

Critical appraisal:

Searched “all available” health databases
- CINAHL, PsycINFO, PsychARTICLES, ERIC,
- Medline, AMED, Embase, AARP ageline, Google.

Searched the reference lists of all articles

Search revealed:

101 studies

12 experimental studies and/or comparative studies were included.
4. Did the reviewers assess the quality of the included trials?

McMaster University Instrument – generic tool for assessing the quality of any quantitative review – (9 to 12 - scoring)

Constructed another instrument to obtain information regarding the process of conducting a review – data extraction, secondary quality appraisal

Limitations

No reliability or validity reported for instruments
Critical Appraisal Skills Program (CASP)

5. If the results of the studies have been combined, was it reasonable to do so?

21 studies

- 12 experimental or comparative
  - Further review

- 9 lower hierarchy
  - Not sent for review
12 experimental studies
83% reported an improvement in outcomes: critical appraisal skills, understanding of biostatistics

Many of the measures were “purpose-built” lacking psychometrics; self-reports
No standard instrument for measuring knowledge acquisition, critical appraisal skills, or knowledge of biostatistics

Preparation
Varied among the different groups
Compulsory preparation to no preparation
7. How precise are the results?
   Quantitative summary not done

8. Can the results be applied to the local population?
   Most of the studies focused on residents, housestaff, post graduate students, surgeons
9. Were all important outcomes considered?
   Few studies
   Multiple different outcomes: critical appraisal skills, reading skills, knowledge, attitudes, understanding biostatistics, satisfaction

10. Should policy or practice change as a result of the evidence in this review?
    Intraprofessional Processes Outcomes
Evolution to Evidence Based Decision Making Club

- What’s the difference
- Push vs Pull of information (Doust et al, EBM journal clubs in general practice, Australian Family Physician, 2008)
Evidence Based Decision Making

- Ask answerable questions
- Acquire the best evidence
- Appraise the evidence
- Apply evidence to patient care

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Steps for Club Creation

- Establish buy in
- Insure that EBP training is available
- Develop guidelines
  - Meeting frequency, day and time
  - Who is in the club
  - Who is running the club
  - What are the goals
  - How will they be met
- Hold on to your hat!
Club Creation

- Watch it fly
- What worked, what didn’t
- Work in progress
- What’s next
Outcome: Integration of EBP into the Dental Curriculum

- Systematic Appraisal of the Professional Literature: Epidemiology & Health Promotion
- Special Patient Care Simulated Competency: Oral & Maxillofacial Pathology, Radiology & Medicine
- Portfolio Case: Cariology and Comprehensive Care
- Post Graduate Student PICO Projects: Orthodontics
- Systematic Review: Endodontics
- Integrated Case Presentations: Interdepartmental
"Eureka! More information!"
Thank you for your attention
Questions?

"Eureka! More information!"