Navigating the Rough Waters of Knowledge Translation (KT) Research: Developing effective search strategies for systematic reviews with a KT focus

1. What is Knowledge Translation?

Knowledge translation (KT) encompasses a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of individuals, provide more effective health services and products and strengthen the health care system.1

2. Why and When is a Review of the Literature Needed?

Research evidence is at the heart of KT and can be used at multiple stages of the evidence implementation process. For instance, one can search for information or literature:
- About the local context the evidence will be adapted to.
- On the known barriers to using a certain practice or technology within the clinical setting.
- To inform about interventions that may facilitate the uptake of research evidence.
- For metrics that might help to evaluate whether the selected intervention was successful.

A systematic review of the literature can be done at any of these stages!

3. Challenges of Searching the KT Literature

- Inadequate Database Indexing
  - Vague/Broad MESH and other subject headings:
    - Evidence Based Practice
    - Practice Based Evidence
    - Practice Based Research
    - Practice Based Innovation
    - Evidence Based Practice
  - Not a Typical PICO
    - Some KT terms can be very general in nature and describe many other unrelated concepts:
      - Transmission
      - Diffusion
      - Education
      - Research use

- KT Terminology is Extremely Varied
  - Hundreds of ways to express “KT” used in the published literature:
    - Knowledge mobilization, knowledge transfer
    - Linkage and exchange
    - Populist sub-disciplines
    - Research to practice
    - Research translation
    - Science communication, teaching,
    - “third mission”.
    - Translational research, transmission, utilization
  - Multidisciplinary in Nature
    - Literature crosses over many disciplines such as Business, Social Sciences, Medicine, therefore you may need to search in many places:
      - Medicine (Veterinary)
      - Sociological Abstracts (Sociology)
      - ABI Inform (Business)
      - CINAHL (Nursing)

- Huge Search Yields
  - KT searches yield high numbers, often with low precision, because of the varied terminology and broad indexing

4. How Do I Answer a KT Literature Search Question?

- Question:
  - What is the efficiency of [X] intervention for pain management?

- Look for:
  - KT intervention studies
    - KT (knowledge-to-action cycles), before and after studies,String and filters used to identify KT literature.
  - KT Theory Literature
    - Theoretical frameworks/ models: Knowledge to Action Cycle, Organizational, Structural Factors
  - KT Terminology Literature
    - Most common terminology: Knowledge to Action Cycle, Organizational theory, Structural factors, Policy

- Where:
  - KT Databases
    - CINAHL, ABI Inform, Web of Science, etc.
  - KT Websites
    - The Registry of Methods and Tools: Knowledge translation methodologies and tools for public health
      - https://www.nccmt.ca/registry/index-­‐eng.html
    - KT Research Policy and Systems:
      - Health Research Policies
    - KT Medical and Tool literature
      - KT knowledge translation methods and tools for public health

- Important Keywords:
  - Knowledge translation
  - Knowledge transfer
  - Health care policy
  - Health care delivery
  - Health care systems

- Important MeSH Terms:
  - Clinical Trials
  - Knowledge translation
  - Evidence-based medicine
  - Medical knowledge
  - Knowledge dissemination

5. References


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