Evidence-based practice and knowledge translation: In tandem or in tension?
Transdisciplinary Model of EBP

Sackett et al., 1996; Haynes et al. 2002; Shaneyfelt et al., 2009
Aims

1) to identify conceptual and methodological blind spots of EBP, and how KT scholars should consider these for their interventions to succeed;

2) to discuss the possible root causes of these blind spots;

3) to discuss how a contemporary view of EBP can pave the way for KT interventions that will produce sustained behaviour change and improve health outcomes.
Barriers to uptake of EBP

- Confidence
- Knowledge
- Competencies
- Roles
- Attitudes
- Underlying philosophy of care
- Training and CPD

- Leadership style
- Culture
- Staff involvement
- Relationships
- Available resources
- Access to literature
- Heavy case loads
- Competing demands

- Policy on care priorities
- Economic & financial incentives
- Regulatory expectations
- Dominant paradigm
- Stakeholder buy-in
- Infrastructure
- Public awareness
- Advances in technology

(Dubouloz 1999; Fortune, 2000; Humphris, et al., 2000; Dysart & Tomlin 2002; Craik & Rappolt 2003; Bennet et al., 2003; Finlayson 2005; Korner-Bitensky 2006; Welch & Dawson 2006; Grol & Wensing 2006; Salbach 2007; Brown 2009; Copley & Allen 2009; Carrier 2010; Dannapfel 2013; Thomas & Law, 2013; Scurlock-Evans 2014; Murray 2015; Bussières 2016; Britton 2016; Yuen et al., 2017; Devery 2018; Bennett 2019; Billings 2018; Summers 2018; Béliveau 2019)
The links or underlying conceptual, philosophical, and methodological principles of EBP and KT, and how these may align or be in tension remains unclear.
**EBP blind spot - The example of back pain**

**Leading cause of disability** worldwide since 1990, mostly affects poorer individuals, living in remote regions, women and older people.

Small clinical benefits of nearly all treatment modalities (>3,600 RCTs)

- **Wrong population** *(most RCTs in high income countries in young middle-age white people, fail to consider associated multisite pain, comorbidities, and Social Determinants of Health)*

- **Wrong treatment** *(most therapeutic modalities focus on back pain only)*

- **Wrong outcomes** *(pain, function, disability)*

Generalizability of international guidelines based on systematic reviews of RCTs?
Reducing barriers to conservative spine care to minimize opioid exposure in the Northern Indigenous community of Pimicikamak, MB, Canada: A Global Spine Care Initiative (GSCI) and World Spine Care Canada (WSCC) implementation project

Aim: to assess the readiness and feasibility to implement a model of spine care in a northern Canada First Nation community using mixed-methods participatory approach.

Remote Northern Indigenous populations have a GREATER burden of injury and diseases. In part, these disparities are due to the LIMITED access to health care. Serious injury and illness require patients to fly out

This project takes place in a First Nations community located 520 km north of Winnipeg, Manitoba’s capital city.
Methods
First Nations Medicine Wheel

Adapted from Juutilainen et al., 2019

Quantitative analysis: Prevalence, burden, self-care

Quantitative analysis:
- Prevalence, burden, self-care
- Causality, Access to Equipment & Services
- Emotional Health
- Physical Health
- Mental Health
- Researcher Positionality
- Capacities, Mobility, Comorbidities, Awareness and Prevention

Qualitative interviews: First Nations persons and their caregivers

Thematic content analysis to identify theoretical opportunities & challenges

Quantitative (Community health survey, Chart review, Adoption survey)

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Results

Quantitative studies

Community Health Survey (n=130)
- 65% Female, M=48.4 yrs (14.3)

Chart review in Nursing Station (n=41)
- 60.9% Female, M=50 years (13.3)

1) Prevalence & burden of spine pain, and related comorbidities are very high
2) Access to high-value spine care is limited
3) Potential to reduce diagnostic imaging and opioids prescribing/use

Qualitative interviews of Clinician (n=10) and Community Leader (n=9)

5) Chiropractic care, manual therapy, massage therapy, and acupuncture align with Indigenous ways of healing
6) Strongly engaged leaders & local clinicians are helping culturally adapt an implementable model of spine care.
Conclusions

Limits

- As the examples are drawn from the field of rehabilitation, conclusions may not generalize to other areas of healthcare or patient populations.

- Optimizing the impact of KT interventions may require a more nuanced perspective of EBP that accepts...
  - a pluralistic view of knowledge and embraces methodological diversity
  - considers the vital role of context & culture in clinical decision-making,
  - supports the use of participatory approaches to design, conduct, and implement EBP.

Partnerships are being positioned as an ideal way to address the problem of the underutilization of research findings.

Kothari et al., (2013)