A Systematic Review of the Factors Influencing Healthcare Managers' Engagement in Evidence Informed Practice

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Background

- Prior systematic review examining the type of evidence used by health care managers

- This review was conducted concurrently to a related review examining interventions to enhance healthcare managers’ use of research evidence in their management practice (Tate et al. In Preparation)

- Follow-up to the review examining the types of evidence used by health care managers

- There is little knowledge around the evidence-informed decision making (EIDM) knowledge practices of healthcare managers.
Defining terms

- **Health care managers**
  - *Health care managers* were defined as persons employed in a formal management/leadership position at any level in a healthcare delivery organization (e.g. vice president, director, executive, manager)

- *Research evidence* was defined as researcher-produced evidence that had been developed in accordance with standard scholarly practices
Purpose

- To conduct a systematic review to isolate factors predictive of research evidence use in the management practices of healthcare managers/leaders
An academic librarian specializing in health sciences aided the research team in developing a comprehensive search strategy.

**Key terms:**
“decision-maker/making,” “research use/utilization” and “healthcare managers/management

Period covered: 1982-2016

**10 Databases (included, but not limited to):**
CINAHL, MEDLINE, PsycINFO, Cochrane Database of Systematic Reviews and Business Source Complete
Inclusion/exclusion criteria

- Set *a priori* by the complete research team (n = 7)

- Applied independently by two reviewers at both the title and abstract review stage and the full-text manuscript review stage

- Included studies:
  - reported on a primary study of healthcare managers, in which the goal (at least in part) was to identify factors related to healthcare managers’ use of research in their management practice

- Excluded studies:
  - if the subjects were primarily policy-makers, if the focus was on clinical decision-making, or if, in the study, knowledge use was defined so broadly as to include non-research evidence
Quality Assessment

- We extracted relevant methodological details and results into a standardized data extraction template.

- We appraised all qualitative papers using Letts, Wilkins, Law, Stewart, Bosch and Westmoreland’s Critical Review Form – Qualitative Studies (Version 2.0) and all quantitative using Cummings et al.’s (2008) tool, which has been employed in multiple reviews to appraise cross-sectional, correlational and exploratory studies.

- Studies containing both qualitative and quantitative results were evaluated using both appraisal tools.

- Studies at all quality levels (low, medium, high) were included in the synthesis of results.
## Quality Assessment

<table>
<thead>
<tr>
<th>Quality Appraisals</th>
<th>Number of Studies</th>
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<tbody>
<tr>
<td>High</td>
<td>15</td>
</tr>
<tr>
<td>Moderate</td>
<td>10</td>
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### Study Characteristics

- **25 included studies**

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of studies</th>
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<tbody>
<tr>
<td>USA</td>
<td>10</td>
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<tr>
<td>Canada</td>
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<tr>
<td>Iran</td>
<td>2</td>
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<tr>
<td>Taiwan</td>
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- **Quantitative**: 7
- **Mixed Methods**: 5
- **Qualitative**: 13
Synthesis

- Thematic analysis conducted independently by three individuals

- Common themes and sub-themes were identified

- Matrix developed to organize themes/subthemes

- Consensus meeting
Results

- Relevant records identified through database searching (n = 15,715)
- Records excluded, duplicates (n = 1,488)
- Records screened based on title/abstract (n = 14,227)
- Records excluded based on title/abstract (n = 14,095)
- Full text articles retrieved for more detailed evaluation (n = 132)
- Articles excluded based on inclusion-exclusion criteria (n = 107)
- Studies met the inclusion criteria (n = 25)
- Articles excluded based on other languages (n = 0)
- Finally Included (n = 25 articles)
Results cont’d

- Three major influencing factors
  - Context
    - level of commitment within the organization to support and implement evidence-informed management practices
    - the presence of organizational policies and mandate
    - the organization’s philosophy that supports evidence-informed healthcare manager practices
Results cont’d

– Contextual barriers
  - a lack of support
  - organizational hierarchy, government policies and mandates that take priority over evidence
  - the benefits of engaging in this EIDM practice were not quickly evident to the policy makers that comprised the larger context
  - EBDM has not been incorporated as a value into organizations nor has the national macro plan been considered.
  - the inability to implement strategies that are supported by the evidence due to factors beyond the leader’s control e.g. budgetary constraints that leaders have no control over and non-technical issues.
Results cont’d

– Facilitators (17/25)
  ▪ Access to adequate human and non-human resources.
    – Human resources included;
      » librarian
      » knowledgeable staff (knowledge brokers, epidemiologists, data specialists)
      » other leaders who could promote and support those wanting to implement evidence into practice
      » leaders who ‘buy into’ EIDM, actively promote it and follow up to ensure implementation occurs
      » leaders who make EIDM a priority
Results cont’d

– Non-human resources included;
  » time to search, read, and apply evidence to management practices
  » access to resources
  » a technical infrastructure capable of supporting evidence-based practice

– Values
  ▪ organizations needed to value and have a philosophy that supported this practice as well as expectations related to the use of research. The organization needs to support EIDM and without this organizational ‘buy-in’, the practice was not implemented or implemented poorly.
Results cont’d

- Healthcare manager characteristics (12/25)
  – played a significant role in influencing use of evidence in their practice
  – Characteristics included:
    - Lack of:
      - understanding of evidence-based practice
      - training in research methods
      - research experience
      - trust in domestic evidence
      - leadership experience
      - critical appraisal skills
      - ability to read English research evidence
      - motivation and confidence
Results cont’d

- Lack of:
  - understanding of the importance of EIDM and limited awareness of EIDM among managers
  - authority to make changes in the clinical setting
  - A negative attitude towards research evidence
Conclusion

- Without a supportive environment and the necessary resources within their institution, health care managers are much less likely to engage in EIDM practice.

- More attention must be paid to supporting healthcare managers to engage with the literature to inform practice.

- Champions of EIDM practices are needed if change is going to occur and ensuring that these individuals are incentivized to push practice forward.
Conclusion cont’d

- Without incentives managers are less likely to engage in EIDM
- Managers require additional training and support to engage in EIDM
- Accreditation can serve as one motivator for leaders to engage in EIDM as it is a measured outcome and there are consequences associated with the outcomes achieved.
Thank you!