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

  – *Review and Synthesis of the Literature Examining Healthcare Managers' Use of Knowledge (Cummings, et al. 2017)*

- 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

Search Strategy

An academic librarian specializing in health sciences aided the research team in developing a comprehensive search strategy.

Key terms:	**10 Databases (included, but not limited to):**
"decision-maker/making," "research use/utilization" and "healthcare managers/management"	CINAHL, MEDLINE, PsycINFO, Cochrane Database of Systematic Reviews and Business Source Complete
Period covered: 1982-2016	

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

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Quality Assessment

Quality Appraisals	Number of Studies
High	15
Moderate	10

Study Characteristics

- 25 included studies

Country	Number of studies
USA	10
Canada	7
Iran	2
Taiwan	1
Brazil	1
Netherlands	1
Caribbean	1
United Kingdom	1
Australia	1

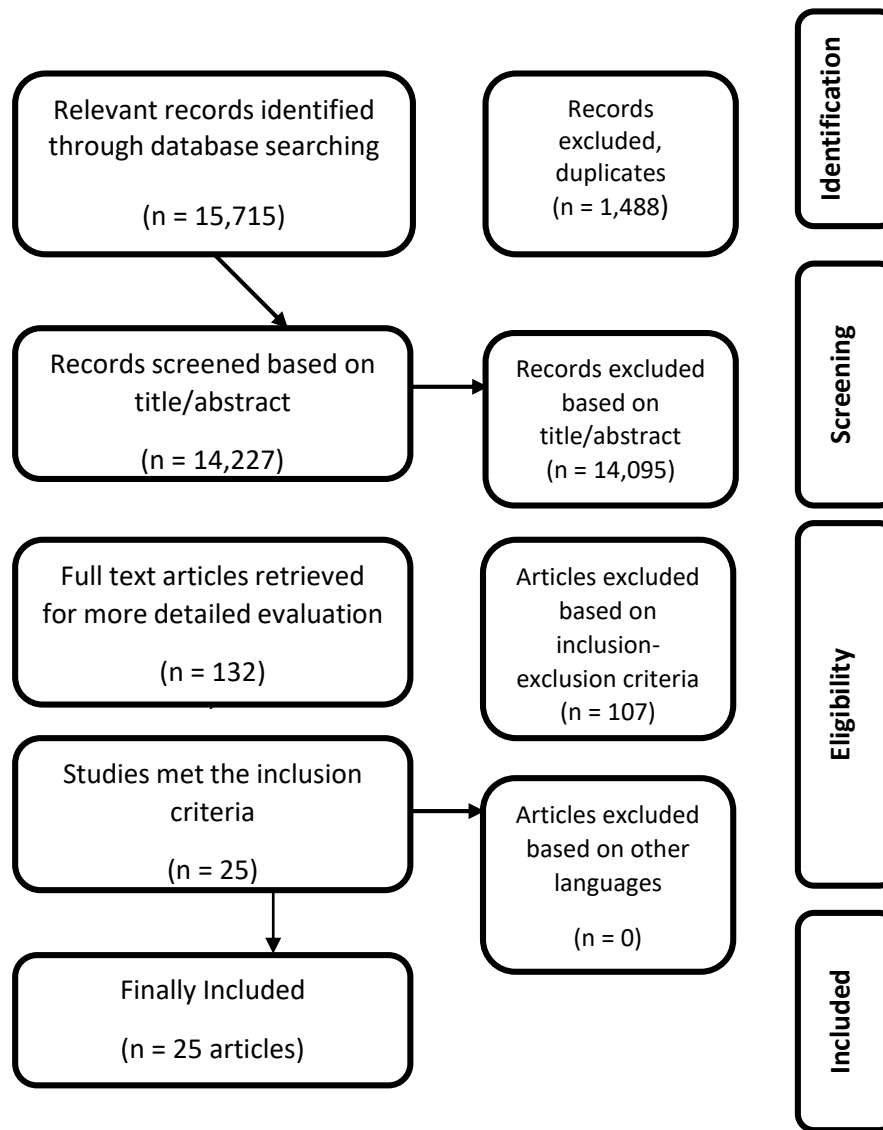| Quantitative	Mixed Methods	Qualitative
7	5	13

Synthesis

▸ Thematic analysis conducted independently by three individuals

▸ Common themes and sub-themes were identified

▸ Matrix developed to organize themes/subthemes

▸ Consensus meeting

Results

Flowchart:

Identification

Relevant records identified through database searching (n = 15,715) → Records excluded, duplicates (n = 1,488)

Screening

Records screened based on title/abstract (n = 14,227) → Records excluded based on title/abstract (n = 14,095)

Eligibility

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)

Included

Finally Included (n = 25 articles)

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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

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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.

- **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

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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!