What are the outcomes associated with the use of online consumer health information? Insights from a systematic mixed studies review

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Background
- Online consumer health information (OCHI) associated with improved knowledge, involvement, and health
- Little is known about its “value” in primary care
- No comprehensive tool to assess information-use

Objectives
- Identify types of OCHI outcomes
- Revise conceptual framework
- Identify conditions associated with positive outcomes

Methods
Eligibility criteria
- Qualitative, or quantitative, or mixed methods study
- French or English (1990-2014)
- Community-based primary health care setting
- OCHI use

Information sources
Medline, Embase, PsycINFO, CINAHL, LISA, and grey literature (search strategy developed and peer-reviewed by librarians)

Selection
2 reviewers (DistillerSR)

Appraisal
2 reviewers using the Mixed Methods Appraisal Tool (MMAT)

Data extraction and synthesis
Phase 1:
- Deductive-inductive thematic analysis (Nvivo)
- Harmonization of themes to develop terminology
- Card sorting exercise to organize influencing factors
- Framework synthesis

Phase 2:
- Configurational Comparative Method (Boolean analysis)
- 3 conditions: health problem, health information literacy, and confidence in OCHI
- Aim to identify conditions that are necessary and sufficient for a positive outcome

Main results from the thematic analysis, harmonization of themes, and card-sorting

Influencing factors
- Individual characteristics: e.g. age, health status, health information literacy
- Socio-technical factors: e.g. social support system, access to Internet
- Patient-clinician relationship: e.g. perception of clinicians towards OCHI
- Healthcare system: e.g. access to health care services

Individual health outcomes
- Positive: increased involvement in health care, health improvement, better communication with health care providers
- Negative: deterioration of the patient-clinician relationship, increased worry, overuse or misuse of health services

Health services outcomes
- Increased physician’s responsibilities, excessive ER visits and longer wait times

References

Phase 1 - Results

PRISMA flow diagram

Revised model: Factors and outcomes of online consumer health information

Phase 2 - Preliminary results

<table>
<thead>
<tr>
<th>Case ID</th>
<th>Health problem</th>
<th>Health literacy</th>
<th>Confidence</th>
<th>Outcome</th>
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It appears that whenever there is “high confidence” OR “high literacy”, there is a positive outcome

NEXT STEPS: Results will be used to develop a Patient Information Aid to help people find and use relevant OCHI

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