IS THERE ANY ROLE FOR SYSTEMATIC/LITERATURE REVIEWS IN POLICY-ORIENTED ECONOMIC RESEARCH?

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ICRIER
New Delhi
08 June 2011
Points

- Research Synthesis
  - Systematic Reviews
  - Literature Reviews

- How to implement a Systematic Review/Literature Review
  - Five steps

- Dialogue, exploration
Aim

The seminar will present and discuss some of the basic ways HOW systematic /literature reviews are formulated currently in the health sciences with the aim to trigger a dialogue with economists around the question of whether there is a role for systematic/literature reviews in policy-oriented economic research.
## Disciplines

<table>
<thead>
<tr>
<th>Economics</th>
<th>Health Sciences</th>
</tr>
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<tbody>
<tr>
<td>Health economics</td>
<td>Biomedicine</td>
</tr>
<tr>
<td>Environmental economics</td>
<td>Nursing</td>
</tr>
<tr>
<td>Development economics</td>
<td>Physiotherapy</td>
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<td></td>
<td>Pharmacy</td>
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<td></td>
<td>Nutrition</td>
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</table>
YOUR IDEAS/EXPERIENCES CONDUCTING

- Literature Reviews?

- Systematic Reviews?
LITERATURE REVIEW

http://www.youtube.com/watch?v=t2d7y_r65HU
## HISTORY

### Relevance, applicability and quality of RESEARCH

<table>
<thead>
<tr>
<th>Should research stay only within the research community?</th>
<th>Should research be disseminated to other stakeholders?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Policy makers</td>
</tr>
<tr>
<td></td>
<td>Practitioners</td>
</tr>
<tr>
<td></td>
<td>Users</td>
</tr>
</tbody>
</table>

http://www.cochrane.org/
Prepares and disseminates Systematic Reviews of the effect of interventions in health care

http://www.campbellcollaboration.org/
To help individuals to make well-informed decisions about education, criminal justice and social work and welfare
RESEARCH SYNTHESIS

It refers to the group of methods for summarizing, integrating, and where possible, cumulating the findings of different studies on a TOPIC or RESEARCH QUESTION.

Types:

- Narrative Reviews (qualitative data)
- Vote Counting Reviews (quantitative data)
- Meta-Analysis (quantitative data)
- Systematic Reviews (quantitative data)
- Literature Reviews (Best Evidence review) (Q & Q)
- Meta-Ethnography (qualitative data)
### Characteristics

<table>
<thead>
<tr>
<th>Systematic Reviews</th>
<th>Literature Reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Primary research</td>
<td>• Primary research</td>
</tr>
<tr>
<td>• Methodology:</td>
<td>• Methodology:</td>
</tr>
<tr>
<td>Quantitative</td>
<td>Quantitative</td>
</tr>
<tr>
<td>• Control trials</td>
<td>&amp; Qualitative?</td>
</tr>
<tr>
<td>• Experimental/</td>
<td>LINK to theory</td>
</tr>
<tr>
<td>• Observational research</td>
<td>(epistemology)</td>
</tr>
<tr>
<td>Social issues?</td>
<td>Positivist/</td>
</tr>
<tr>
<td>Positivist (Epistemology)</td>
<td>Phenomenological</td>
</tr>
<tr>
<td>Evidence</td>
<td>Critical/Postmodernist</td>
</tr>
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</table>
Step 1: Framing questions for a review

The problems to be addressed by the review should be specified in the form of clear, unambiguous and structured questions before beginning the review work.
RESEARCH QUESTIONS: EXAMPLES

- Can length of stay be reduced from 5 to 3 days in patients admitted with COPD, by facilitating early supported discharge?

- What is the role of screening tools in identifying vulnerable women antenatally?

- What tools are available for reviewing the nursing structure within contraception and sexual health services prior to change of organisation?
Step 2: Identifying relevant work

- The search for studies should be extensive. Multiple resources (both computerized and printed) should be searched without language restrictions.

- The study selection criteria should flow directly from the review questions and be specified a priori. Reasons for inclusion and exclusion should be recorded.
<table>
<thead>
<tr>
<th>Database</th>
<th>Key Words- used in various combinations</th>
<th>Number of Hits</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pubmed..</td>
<td></td>
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</tbody>
</table>
PICO (INCLUSION AND EXCLUSION CRITERIA)

• Population: adults
• Intervention: group counselling
• Context: hospital smoking cessation clinic
• Outcome: giving up smoking
THE CONDUCTION OF A SYSTEMATIC REVIEW/LITERATURE REVIEW

**Step 3: Assessing the quality of studies**

- Study quality assessment is relevant to every step of a review.
- Selected studies should be subjected to a more refined quality assessment by use of general critical appraisal guides and design-based quality checklists.
- These detailed quality assessments will be used for exploring heterogeneity and informing decisions.
RESOURCES

Step 4: Summarizing the evidence

- Data synthesis consists of tabulation of study characteristics, quality and effects as well as use of research methods for exploring differences between studies.
<table>
<thead>
<tr>
<th>Author</th>
<th>Theory</th>
<th>Methodology</th>
<th>Findings</th>
<th>Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Any theoretical points</td>
<td>Research Methods Qualitative Quantitative Both</td>
<td>Research Context Sample</td>
<td>Main results or outcomes achieved</td>
</tr>
<tr>
<td>Theories</td>
<td>Epistemology Positivism Critical theory Phenomenology</td>
<td></td>
<td></td>
<td></td>
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</table>
**Step 5: Interpreting the findings**

- The issues highlighted in each of the four steps above should be met.
- The risk of publication bias and related biases should be explored.
- Any recommendations should be graded by reference to the strengths and weaknesses of the evidence.
# Table of Contents

1. Introduction
   - 1.1 Rational of the Literature Review (LR)
   - 1.2 Aims & Objectives of the LR

2. Methods & Methodology
   - 2.1 Scope & Limitations of the LR
   - 2.2 Inclusion and exclusion criteria of the LR
   - 2.3 Qualitative/quantitative issues related to the LR

3. Results & Analysis
   - 3.1 Critical review of the literature
   - 3.2 Discussion of findings from the LR
   - 3.3 Key issues emerging from the LR

4. Implications and recommendations for change in practice as per the LR

5. Conclusion(s)

6. References

7. Bibliography

Appendixes (if needed)
Based on the evidence presented by the LR the question is appropriate.

many studies........conclusion is appropriate

Although the research question cannot be proved by the LR, it is the best guess

Flaws/inconsistencies........conclusion is appropriate
4 TYPE OF CONCLUSIONS IN A LITERATURE REVIEW (LR)

- Evidence is lacking to know if the research question is appropriate or inappropriate. Many studies do not provide adequate evidence.

- The research question is not valid.
**Methodological Convergence**

High diversity of methods is a healthy approach to research

None method is perfect

Diversity better than quantity: Examples

- Questionable study: 50 studies (one method) one conclusion
- Acceptable study: 5 studies (diverse methods) one conclusion
COMMON MISTAKES

- Inadequate coverage of evidence (details)
- Lack of integration (theory)
- Lack of critical appraisal (weaknesses and flaws of evidence/ bias critiquing evidence)
- Failure to adjust conclusions (sweeping conclusions)
COMMON MISTAKES

- Assertion versus evidence (idea/evidence)
- Selective review of evidence (my argument/other’s argument)
- Evidence and counter-evidence
- Focus on the research rather than the researcher
- Future implications
DIALOGUE
THANK YOU!!
GRACIAS!!