2014

Summarizing bodies of evidence on the implementation and effectiveness of FP/RH interventions

Ian Askew
Population Council

Follow this and additional works at: https://knowledgecommons.popcouncil.org/departments_sbsr-rh

Part of the International Public Health Commons, Maternal and Child Health Commons, Quantitative, Qualitative, Comparative, and Historical Methodologies Commons, and the Women's Health Commons

Recommended Citation

This Presentation is brought to you for free and open access by the Population Council.
Summarizing bodies of evidence on the implementation and effectiveness of FP/RH interventions

Ian Askew

*Improving recommendations for policies and practices to strengthen people-centered health systems: Is the State of Evidence sufficient?*

Satellite Session
Third Global Symposium on Health Systems Research
September 29, 2014, Cape Town, South Africa
Approaches to compiling and summarizing bodies of evidence

- Systematic Review
- Realist Review
- Rigorous Review
The key characteristics of a **systematic** review are:

- A clearly stated set of objectives with pre-defined eligibility criteria for including studies;
- An explicit, reproducible methodology;
- A systematic search that attempts to identify all studies that would meet the eligibility criteria;
- An assessment of the validity of the findings of the included studies;
- A systematic presentation, and synthesis, of the characteristics and findings of the included studies.

(Cochrane Review)
Systematic review process

• **Step 1:** Initiate the process:

• **Step 2:** Develop the review protocol:

• **Step 3:** Systematically locate, screen, and select the studies for review

• **Step 4:** Appraise the risk of bias in the individual studies and extract the data for analysis

• **Step 5:** Synthesize the findings and assess the overall quality of the body of evidence

• **Step 6:** Prepare a final report and have the report undergo peer review

# Systematic vs. Rigorous reviews

<table>
<thead>
<tr>
<th>Systematic review</th>
<th>Rigorous / expert review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starts with a clear question/hypothesis</td>
<td>May start with a general discussion</td>
</tr>
<tr>
<td>Team of authors including methodologists</td>
<td>Authors are usually content experts</td>
</tr>
<tr>
<td>Thorough literature search methods</td>
<td>Does not always include literature search</td>
</tr>
<tr>
<td>Explicit inclusion and exclusion criteria</td>
<td>Vague inclusion +/- exclusion criteria</td>
</tr>
<tr>
<td>Assessment of risk of bias</td>
<td>Bias not usually assessed</td>
</tr>
<tr>
<td>Appraisal of strength of evidence e.g. GRADE</td>
<td>Limited formal appraisal of evidence</td>
</tr>
<tr>
<td>Managed conflicts of interest</td>
<td>Conflicts of interest not always stated</td>
</tr>
</tbody>
</table>

Source: Isba 2013
Rigorous reviews using an **evidence framework**

“A global health evidence framework [is] one which uses multiple domains to arrive at a summary judgment of the evidence for community or population health interventions or programs”

Source: Luoto et al, 2013

- Systematic and rigorous
- Transparent procedures
- Summary judgment
- Rating across multiple domains
  - Quality, quantity, relevance, consistency, context....
- Focus on evidence of effectiveness of an intervention
Examples of domains for grading strength of evidence

<table>
<thead>
<tr>
<th>USCPSTF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Execution</td>
</tr>
<tr>
<td>Design suitability</td>
</tr>
<tr>
<td>Number of studies</td>
</tr>
<tr>
<td>Consistency</td>
</tr>
<tr>
<td>Effect size</td>
</tr>
<tr>
<td>Expert opinion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DFID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of studies</td>
</tr>
<tr>
<td>Quality of body of evidence</td>
</tr>
<tr>
<td>Context</td>
</tr>
<tr>
<td>Consistency</td>
</tr>
<tr>
<td>Diversity of methods</td>
</tr>
</tbody>
</table>

But....Evidence frameworks differ in terms of how domains are rated:

- Classifying strength of evidence
- Magnitude of benefits vs. harms
- Consideration of context
- Implementation procedures
- Feasibility
- Costs
- Sustainability
Realist reviews

- Identifies underlying **causal mechanisms** of a complex intervention and explores how they work within a **specific context** to produce particular outcome(s)

  \[ \text{Context} + \text{Mechanism} = \text{Outcomes} \]

- **C-M-O** configuration explains why and how an intervention works: Theory of Change (“program theory”)
Example of a C-M-O Theory of Change

“In this context, that mechanism generates this outcome”

For a fee-removal intervention:

“Poor couples who value family planning (C) are enabled (M) to use contraception to space their pregnancies (O)”
## Approach to a realist review

<table>
<thead>
<tr>
<th>Stage</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define the scope of the review</td>
<td>Identify the question</td>
</tr>
<tr>
<td></td>
<td>Clarify the purpose of the review</td>
</tr>
<tr>
<td></td>
<td>Find and articulate the ToCs</td>
</tr>
<tr>
<td>Search for and appraise the evidence</td>
<td>Search for the evidence</td>
</tr>
<tr>
<td></td>
<td>Test of relevance</td>
</tr>
<tr>
<td>Extract and synthesize findings</td>
<td>Extract the results</td>
</tr>
<tr>
<td></td>
<td>Synthesize the findings</td>
</tr>
<tr>
<td>Develop narrative</td>
<td></td>
</tr>
</tbody>
</table>

Source: Rycroft-Malone et al., 2012
Which type of review and body of evidence for which type of recommendation?

**Efficacy** of an intervention in meeting health needs of the individual / couple
- Service delivery guidelines

**Effectiveness** of delivering interventions at the population level
- Delivery programming guidance

**Sustainability** at national / programme level
- Systems strengthening and scale-up / mainstreaming
Recommendations
Recommendations

Bodies of evidence that inform decision-makers on the effectiveness of interventions are best summarized using a transparent, structured review process that includes evidence from both randomized and rigorous non-randomized designs with systematic comparisons.

Bodies of evidence to inform implementation and scaling-up decisions can be derived from implementation research and economic evaluations. Highest-quality data are generated when the decision question is clearly stated and the research design tailored to generate evidence that will address that question.

Such bodies of evidence should be guided by a theory of change, reviewed rigorously, synthesised systematically, and summarised to inform implementation decisions identified by decision-makers.
Recommendations

A systematic, transparent, and replicable process, guided by an explicit evidence framework, should be followed when developing practice recommendations from a body of evidence. The evidence framework should incorporate those domains that are of specific interest to particular decision-makers; different evidence frameworks may be appropriate for summarising evidence to inform different types of decisions.

**Recommendation formulation** should be carefully planned and implemented, using a representative and knowledgeable expert group and recommendation statements or diagrams that accurately and unequivocally represent the body of evidence available.

Given the diversity of contexts in which RH/FP interventions are implemented, recommendations for implementation should offer a choice of options – that is, should be ‘evidence-informed’ – rather than specify a single ‘evidence-based’ recommendation for addressing a particular need or problem.