

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

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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

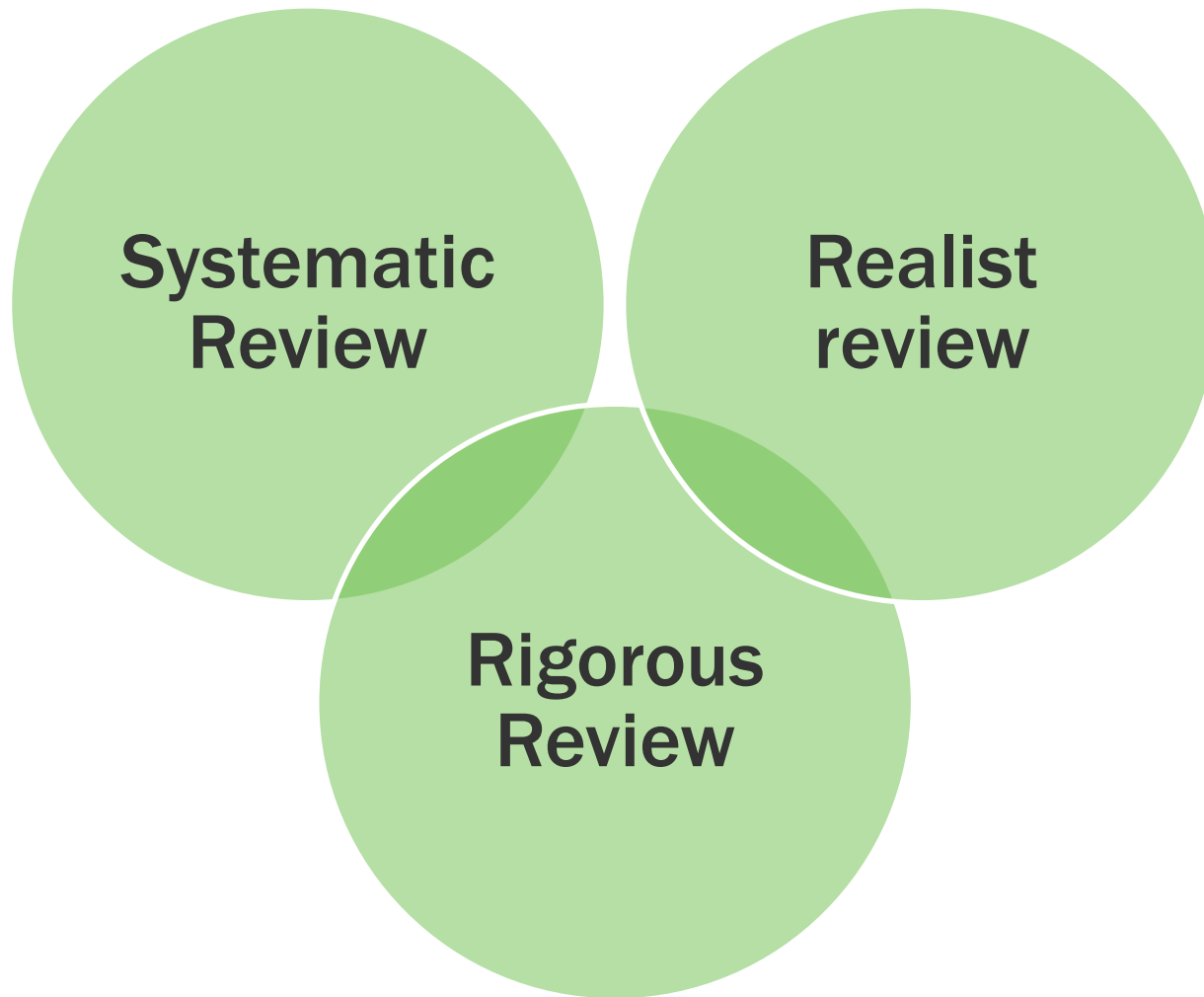
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Approaches to compiling and summarizing bodies of evidence



Systematic Reviews

“A systematic review is a scientific investigation that focuses on a specific question and uses explicit, pre-specified scientific methods to identify, select, assess, and summarize the findings of similar but separate studies. It may include a quantitative synthesis (meta-analysis), depending on the available data”
(Institute of Medicine, US National Academy of Sciences)

“A systematic review can be defined as a summary of the literature that uses explicit and systematic methods to identify, appraise and summarize the literature according to predetermined criteria. If this description (of the methods) is not present, it is not possible to make a thorough evaluation of the quality of the review”
(UK National Institute for Health & Clinical Excellence)

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

Institute of Medicine 2011. *Finding what works in health care: standards for systematic reviews*, National Academy of Sciences

Systematic vs. Rigorous reviews

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

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

USCPSTF

Execution

Design suitability

Number of studies

Consistency

Effect size

Expert opinion

DFID

Number of studies

Quality of body of evidence

Context

Consistency

Diversity of methods

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)

Context + Mechanism = 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

Stage	Action
Define the scope of the review	Identify the question
	Clarify the purpose of the review
	Find and articulate the ToCs
Search for and appraise the evidence	Search for the evidence
	Test of relevance
Extract and synthesize findings	Extract the results
	Synthesize the findings
Develop narrative	

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

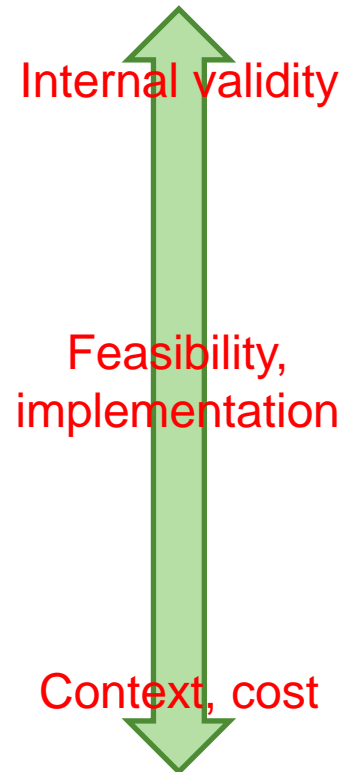
- Service delivery guidelines

Effectiveness of delivering interventions at the population level

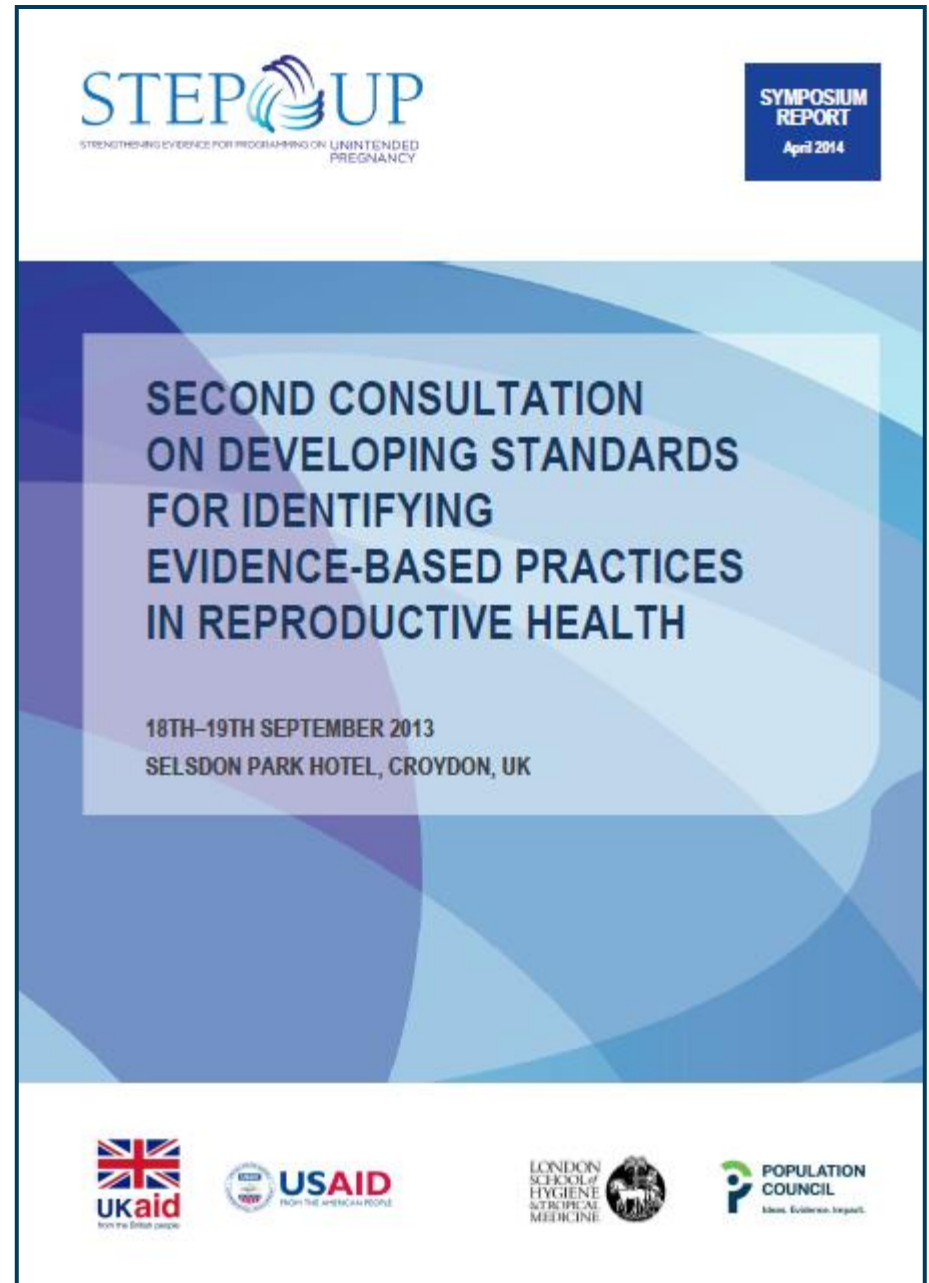
- Delivery programming guidance

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