

Evidence summaries tailored to health policy-makers in low- and middle-income countries

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introduction

maximize the use of available resources

- Importance of Systematic reviews
 - not only clinical interventions
 - reduce the chances of being misled
 - make finding and appraising the evidence much easier and faster
 - illuminate areas where no evidence exists
 - contain findings that are relevant for LMICs

deficit :most are written largely for scientific audiences

- The Supporting Policy-relevant Reviews and Trials (SUPPORT)
- Our objective was to tailor a summary format that was sensitive to the needs of policy makers

Table 1. **Information needs of policy-makers with respect to the evidence**

General topic	What is already known
Retrieval	<p>Timely retrieval of relevant research facilitates use.^{10,11}</p> <p>Time scale for commissioning new research fits poorly into time frame for policy-making.¹²</p> <p>Research is often published in academic sources poorly accessible to policy-makers.¹³</p>
Relevance for LMICs	<p>LMIC policy-makers may have limited access to subscription-based information or to the Internet.^{14,15}</p> <p>Research carried out in high-income countries may have limited applicability to LMICs.¹⁶⁻¹⁸</p>
Content	<p>Systematic reviews sometimes answer too narrow a question.¹⁹</p> <p>Policy-makers want not just information about “what works”, but also clearly articulated implications for policy, such as costs, applicability, impacts on equity.^{1,3,10,13,20-22}</p>
Design/ease of use	<p>Length is a barrier; short summaries (with key messages highlighted) are strongly preferred.^{10,13,20,23}</p> <p>The perceptions that reviews facilitate the critical appraisal of evidence and are easy to use are strongly associated with use.⁶</p> <p>Correct understanding of evidence and its quality in full-text format may be difficult for non-researchers. Tables that summarize findings may help.²⁴</p> <p>Use of familiar, jargon-free “plain language” is recommended.^{13,25}</p>

LMICs, low- and middle-income countries.

Methods

- **Selecting reviews and developing content**
- identify systematic reviews from Cochrane Library, MEDLINE and EMBASE
- assessed review quality using a checklist and assessed evidence quality using GRAD
- Develop and assess the completed summaries
- **Developing summary format**
- methods section short description of review characteristics
- discussion section different aspects of the information's relevance for LMICs applicability of the evidence to LMIC settings, impact on equity, the costs and other considerations , need for further evaluation.
- **user perspective and author's perspective**
- **working group workshops**
- **design new summary versions**

Methods

- **Testing the summaries**
- three pilot user tests with participants from Norwegian government agencies
- test the summaries with 18 policy-makers in Argentina (6), China (3), Colombia (3), South Africa (3) and Uganda (3)
- testing method : think-aloud protocol using a semi-structured interview guide
- The interview guide was based on a framework for user experience with six facets: “findability, credibility, usability, usefulness, desirability and value
- separate analyses by two researchers
- ask advisory group comments in a telephone meeting.
- sent the participants both a brief outline of our findings and the old and new summaries by post or e-mail.

Results

- Participants : full-time medical school employment national or international health service or policy-related work in health departments, national insurance programmes , hospitals or aid organizations.

- **Usefulness**

16..... evidence summary would be useful
graded-entry format with key messages up front

Many still felt a mismatch between the type of content offered and their information needs:

Some respondents expressed unmet expectations

- expected content lying outside the scope of a review:
recommendations, outcome measurements not usually included in a review, detailed information about local applicability or costs

usefulness

- “[The summary] explains that there is a high degree of satisfaction with what the nurse practitioners are doing compared to the doctors. But it doesn’t say ... whether they are supposed to cover what the medical doctor or practitioner usually covers. And what sort of services? Is it general practice, is it in a hospital ward or where?”

results

- **Usability**
- 5.....felt that the summary was not comprehensive enough.
- 6.....wanted a shorter, clearer presentation
- 8.....found the tables difficult or confusing,
- 9..... the concepts presented in them, (including those that showed the GRADE assessment and different levels of risk), were not clear
- tables running over two pages were cumbersome to read
- abbreviations caused confusion
- numbers in the text with those in the tables
- use of jargon and/or unfamiliar vocabulary

Usability

- “This section [summary of the findings] would be very difficult to understand by people not trained in evidence-based medicine. Words like ‘sample size’ and ‘relative risk’ would be difficult to interpret...”

Credibility

participants were asked if they would trust the summary.

- 12they would trust it because they perceived it as coming from credible sources:
- “I would trust a report like this. It uses systematic reviews as sources of information and I know that this kind of information is of high quality.”
- “The references are clear as well as the source. That’s the most important thing

result

Credibility

- Poor understanding that the summary stemmed from a systematic review.
- confusion about authorship (partner logos appeared on the last page)
- reduced interest in the content when they discovered that the quality of the evidence was low, that no evidence for important outcomes existed or that the studies were old.
- One participant was confused about how a high-quality review could be compatible with low-quality evidence

result

- 17.....valuable

Desirability

14..... front page with key messages/

section on the relevance for LMICs.

7..... table describing the characteristics of the reviews

“[I] like this chart; it makes clear what the review was looking for.”

5.....framing of the title as a question

result

“Findability”

where they would expect to find these summaries,

- 7.....“in face-to-face meetings”.
- Manythe web sites of the World Health Organization, the Pan American Health Organization, the Cochrane Collaboration, health ministries and universities.

obvious solutions

- limiting the number of tables and not letting them break across pages;
- ensuring that the results in the text matched those in the tables;
- eliminating abbreviations;
- using consistent language and standard phrases to describe effect sizes and the quality of the evidence
- replacing unfamiliar terms or adding definitions;
- moving partner logos and the summary publication date to the front page.

Three challenging findings

- (i) participants' poor conceptual understanding of systematic reviews
- (ii) participants' expectations that they would receive information not found in the systematic reviews
- (iii) participants' expressed desire for shorter, clearer summaries.

participants' poor conceptual understanding of systematic reviews

- “information about the information” or meta-information in the form of boxes placed throughout the summaries.

(ii) participants' expectations that they would receive information not found in the systematic reviews

- Replacement the section for references with a section for “additional information”.
- to broaden the scope of this section and include not only research references but also information that was helpful for understanding the problem, that provided details about the interventions or that put the results of the review in a broader context.

(iii) participants' expressed desire for shorter, clearer summaries.

- reformatting the text
- findings in the text as bullet point items highlighted with blue arrows;
- Dividing the part on relevance into a table placed between the findings and the section on the authors' interpretations;
- the table with the characteristics of the review was moved to the background section,
- Using a narrower font to reduce document length.

Follow-up interviews

- All preferred the new format
 - new front-page design
 - addition of the meta-information boxes
- 2.....earlier misgivings about missing content outside the scope of a systematic review.
- 1..... felt that the tables remained confusing because “relative risk” was still not defined.

discaution

- The sections of the summary on key messages and relevance for LMICs proved to be the most interesting to participants
- The advisory group and the participants agreed with our analysis and supported our subsequent changes.

Study strengths and weaknesses

- Strengths
 - wide range of policy-makers
 - multi-disciplinary advisory group of researchers and summary authors from LMICs
- Weaknesses
 - Translation
 - participants' awareness that interviewers were involved in preparing the summaries
 - summary were not necessarily matched to participants' interests

Other summaries and evaluations

- Lavis et al.
 - a graded-entry format and up-front take-home messages are more useful
- Evidence Aid summaries
 - the summaries coverage were not restricted to a single review
 - language should be tailored to non-clinical audiences.
- In both studies, content that helped users to contextualize the evidence (e.g. a discussion of applicability) was found to be particularly valuable.

Shorter messages or rapidly scannable texts?

- There is, however, a limit to how much information can be condensed before it loses value and credibility. When these limits are reached, editing the text does not suffice and methods such as graded-entry structuring of the text and front-page summaries of key messages must be used.
- Bulleted lists, shorter paragraphs and use of headings

comprehension of numbers and statistics

- correct comprehension depends not only on the skills and knowledge of the reader, but also on the way the information is presented
- assuming a weak background knowledge and low “statistical literacy”

Future research

- Systematic reviews.....policy-makers' questions

The answers to these questions will vary from setting to setting and cannot be provided by a single, generic summary.

Future research

Summaries

- can support policy-makers by including content that maps out the main issues they may need to consider in their own contexts
- Despite the lack of local detail in the texts they were given, policy-makers in our study found this general type of information very useful.
- understanding the nature of the problem at hand
- possibility that future research should explore

Conclusion

- Systematic reviews are an important resource, but policy-makers are often unfamiliar with them and they are not easily accessible. Summaries of systematic reviews can help address these problems as long as they are clear and easy to read or scan quickly. They should also help to clarify the nature of the information provided by a systematic review and its applicability to policy decisions.