## Exercise 10.1 The contribution of new research

Look at the four contributions that new research can make to existing research (see Box 10.1). Which seem particularly relevant to your own review? Are any contributions that your review might make not covered by these four generic headings?

To recap, the four potential contributions were:

* *Theory testing or validation*: if a review is a contribution to an established line of theory and empirical research, it should make clear what the contributions are and how the study contributes to testing, elaborating or enriching that theoretical perspective.
* *Theory generation*: if a review is intended to establish a new line of theory, it should make clear what that new theory is, how it relates to existing theories and evidence, why the new theory is needed, and the intended scope of its application.
* *Problem solving*: if a review is motivated by practical concerns, it should make clear what those concerns are, why they are important, and how this investigation can address those concerns.
* *Fact finding*: if a review is motivated by a lack of information about a problem or issue, the problem formation should make clear what information is lacking, why it is important, and how this investigation addresses the need for information.

Response:

Our fictional review on mobile health applications for maternal, newborn and child health in Lower and Middle Income countries can be mainly located within the ‘problem-solving’ category i.e. could this technology address long-standing problems in this challenged population. However, I found myself wondering whether the ‘fact-finding’ category should contain a specific sub-category that relates to ‘Identifying the need for further research’.

## Exercise 10.2 Consumers of your review

In marketing terms, we think about a synthesis product in terms of its primary audience (the main consumers of your review) and its secondary audiences (others who may be interested in your review. For example, the primary audience of a review included in your thesis might be the external examiner and secondary audiences might be your supervisor, other academics in your discipline and, possibly, practitioners in your chosen field.

For your own review complete the following grid:

Using our fictional review on mobile health applications for maternal, newborn and child health in Lower- and Middle-Income countries:

|  |  |
| --- | --- |
| Primary audience(s)  Policy makers in Low- and Middle-Income Countries | What do I already know about their reading preferences? |
| Policy makers require brief summaries of the evidence in an easy to read format, using tables and graphics |
| How could I find out more about their reading preferences? |
| Published studies of health care decision making in Africa, Latin America, etc. |
| Secondary audience(s)  Health care workers in Low-and Middle-Income Countries  Health students in LMICS | What do I already know about their reading preferences? |
| Health care workers in LMICs do not have access to many printed journals. May need to target local and regional journals or mobile phone (SMS) news services |
| How could I find out more about their reading preferences? |
| Contact with stakeholders in primary countries of interest. Contact with educators in the same countries |

## Exercise 10.3 Producing a draft report structure

Produce a draft report structure for your review using the sections described above. Try to allocate an appropriate word limit to each section based on the size and scope of your review and its intended focus.

Response:

For our fictional review, we have devised the following structure based on the published review:

Lee, S.H., Nurmatov, U.B., Nwaru, B.I., Mukherjee, M., Grant, L. and Pagliari, C. Effectiveness of Health interventions for maternal, newborn and child health in low- and middle-income countries: Systematic review and meta-analysis. J Glob Health. 2016, 6(1): 010401. doi: 10.7189/jogh.06.010401.

The systematic review is thus targeted at a peer-reviewed open-access journal.

**Abstract (250 words)**

* Objective
* Methods
* Findings
* Conclusions

**Introduction (500 words)**

**Methods (500 words)**

* + Search Strategy and Study Selection
  + Assessment of Risk of Bias
  + Meta-analysis

**Results (1250 words)**

* + Study Selection and Characteristics
  + Assessment of Risk of Bias
  + Mobile Delivery media
  + Types of Interventions
  + Types of Outcomes Examined

### Effects on maternal, newborn and child morbidity and mortality

### Effects on infant feeding

### Effect on health care utilisation and quality of care

### Ongoing studies

**Discussion (750 words)**

**Conclusions (250 words)**

**Acknowledgements**

**Ethical approval**

**Funding**

**Authorship declaration**

**Competing interests**

**Appendices**

* + **Search Strategies**
  + **Table(s) – Risk of Bias Assessments**
  + **Table(s) – Characteristics of Included Studies**

## Exercise 10.4 Identifying and using reporting guidelines

Many guidelines for reporting, generic and specific, are contained at the useful EQUATOR Network Website. The main standards relating to reviews are given in Table 10.3.

Look at the EQUATOR Network Website (<http://www.equator-network.org/>). Which guidelines are most informative for your review? Identify the guideline and its source reference in the boxes provided. Once you find a reporting guideline appropriate to your review, revisit your draft review structure and revise it in view of the requirements.

Response:

For our fictional review on mobile health applications for maternal, newborn and child health, we are conducting a ‘conventional’ systematic review with meta-analysis, involving comparative effectiveness studies. However, we are specifically working on evaluation of health informatics interventions. We therefore use the EQUATOR Network Website to identify:

|  |  |
| --- | --- |
| 1. **Reporting guideline** | 1. **Reference Citation** |
| **Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement** | Moher, D., Liberati, A., Tetzlaff, J. and Altman, D.G., The PRISMA Group. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med. 2009, 6(7): e1000097. |
| **STARE-HI – Statement on reporting of evaluation studies in Health Informatics** | Talmon, J., Ammenwerth, E., Brender, J., de Keizer, N., Nykanen, P. and Rigby, M. STARE-HI – Statement on reporting of evaluation studies in Health Informatics. Int J Med Inform. 2009, 78(1): 1–9. |