

Online Workshop: Qualitative Research Synthesis

Additional Materials: Steps for Preparing a Qualitative Systematic Review

*Karin Hannes, KU Leuven
Methodology of Educational Sciences Research Group*

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**WHAT DOES A REVIEW PROTOCOL
LOOK LIKE?**

Defining a review protocol

- ‘A Review Protocol is a document that sets out the reviewers’ intentions with regard to (a) the topic and (b) the methods to be used in carrying out a proposed review’ (**Campbell Collaboration Guidelines** for Preparation of Review Protocols)
- ‘A protocol is a plan or set of steps to be followed in a study. A protocol for a systematic review should describe the rationale for the review; the objectives; and the methods that will be used to locate, select and critically appraise studies, and to collect and analyse data from the included studies.’ (**Cochrane Reviewers Handbook**)



THE CAMPBELL
COLLABORATION



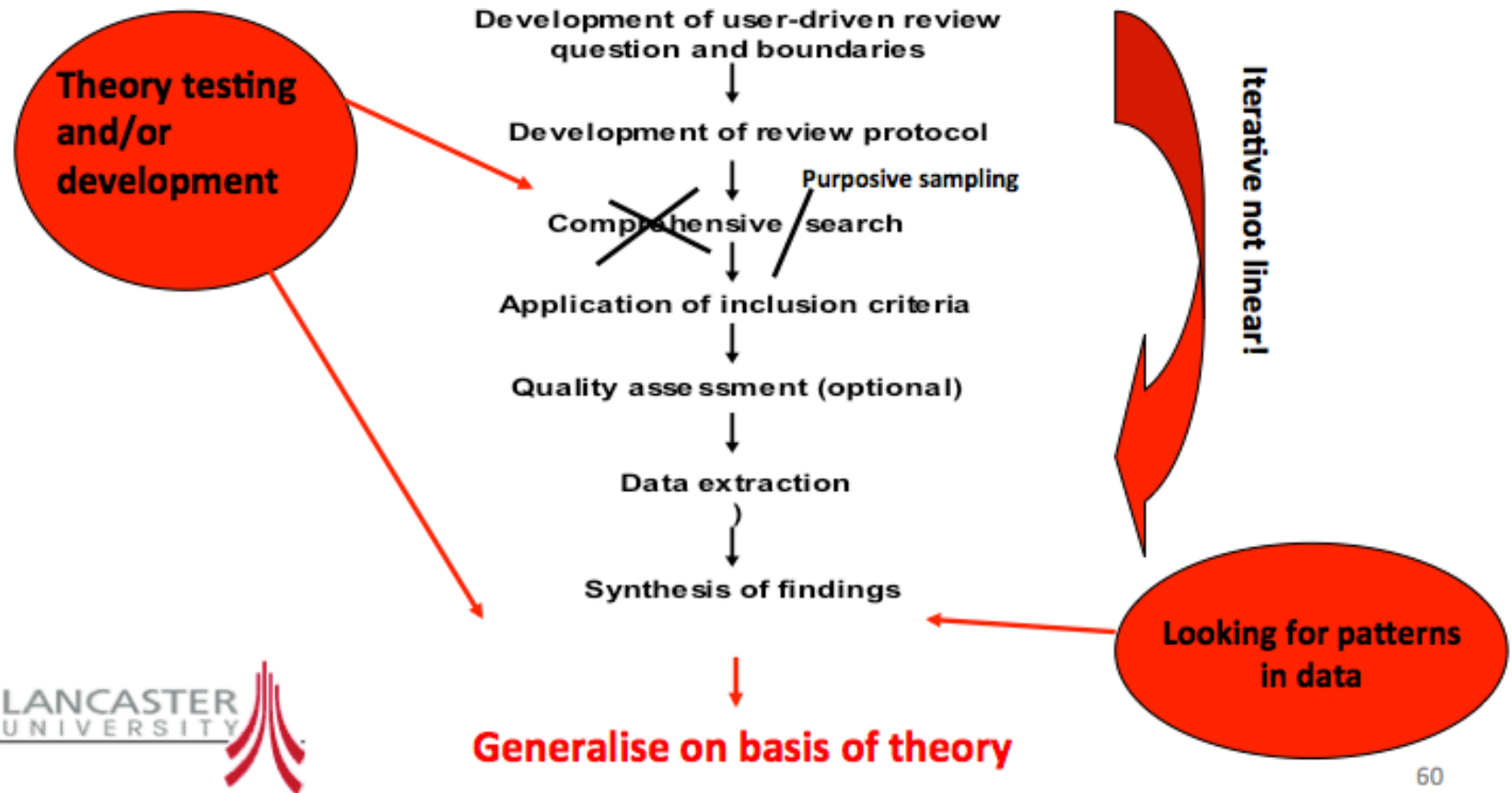
THE COCHRANE
COLLABORATION

Steps to protocol development

- The steps to protocol development are basically similar, regardless of the type of review
- Scoping the literature
- Providing rationale for the review
 - Describing the condition or situation
 - Describing the intervention/phenomenon of interest
 - Why it is important to do the review
- Formulating a question and setting objectives
- Setting criteria for inclusion
 - Population
 - Intervention/Phenomenon
 - Study type
- Search strategies
- Outlining methods for data collection and analysis
- Anticipating how results will be presented

Procedural approach

Flexibility and iteration
not rules and linearity



Scoping the literature

Effectiveness review

- Preliminary search using similar sources and terms to those that will be used in the review, to identify
 - Amount of literature
 - Diversity in population, intervention, outcomes
 - Definitions of PICO
- Mapping used to consider how to limit the review – by P., I, C, O – or to conduct subgroup analysis
- Mapping sets a priori limits – no deviation permitted

Qualitative evidence synthesis

- Preliminary search using the sources and terms that are of initial interest, to identify
 - Amount of literature
 - Diversity of literature
- Mapping is considered the first stage of an iterative search, that will continue as the review reveals areas that need further exploration

Providing a rationale

Effectiveness review

- Describing the condition or situation
- Describing the intervention
- Justifying importance of compiling evidence of effectiveness

Qualitative evidence synthesis

- Describing experiences, attitudes, behaviours related to the condition or situation
- Describing reactions to the intervention
- Justifying importance of compiling evidence explaining effectiveness (or lack of)

Rationale for the Lewin and Glenton reviews

Effectiveness of LHW interventions

- Situation: chronic shortage of health workers; increasing needs for treatment; need to meet Millennium Development goals
- Task shifting to alleviate demand on doctors and nurses

Implementing LHW programmes

- Situation & intervention the same
- Rationale: To explain the heterogeneous effects identified in the effectiveness review

Formulating a question and setting objectives

Effectiveness review

- Standard format of
- Population
- Intervention
- Comparison
- Outcome

Qualitative evidence synthesis

- 'How?' and 'Why?' question format
- Oriented toward exploring particular phenomenon that is relevant to the population, intervention or outcome

Formulating a question and setting objectives

Effectiveness of LHW interventions

- To assess the effects of lay health worker interventions in primary and community health care on maternal and child health and the management of infectious diseases

Implementing LHW programmes

- To explore factors affecting the implementation of lay health worker programmes for maternal and child health.
 - Identify barriers and facilitators to the implementation of LHW programmes;
 - integrate the findings with those of the review of effectiveness (Lewin 2012)
 - enhance and extend our understanding of how these complex interventions work and how context impacts on implementation;
 - • to identify hypotheses for subgroup analyses of future updates of the Cochrane review (Lewin 2012).

Setting criteria for inclusion

Effectiveness review

- Types of studies to be included
- Detailed definitions and parameters for the population and intervention
- Setting parameters on primary and secondary outcomes to be considered
- Quality threshold, determined by critical appraisal of the primary research

Qualitative evidence synthesis

- Studies may include all qualitative methodologies, or be limited to a particular methodology
- Population to match that in the effectiveness review
- Outcomes may not be the phenomenon of interest
- 'Quality' may not be as important as relevance

Setting criteria for inclusion:

Study type

Effectiveness of LHW interventions

- RCTs

Implementing LHW programmes

- We will employ a broad definition of qualitative studies and include all studies that use qualitative methods for data collection (including focus group and individual interviews, observation, and document analysis) and that use qualitative methods for data analysis. We will exclude studies that collect data using qualitative methods but do not analyse those data qualitatively.

Setting criteria for inclusion: Population

Effectiveness of LHW interventions

- Any lay health worker (paid or voluntary) including community health workers, village health workers, birth attendants, peer counsellors, nutrition workers, home visitors.
- We defined the term lay health worker as any health worker who:
 - performed functions related to healthcare delivery,
 - was trained in some way in the context of the intervention,
 - but
 - had received no formal professional or paraprofessional certificate or tertiary education degree.

Implementing LHW programmes

- LHW definition was exactly the same
- Relevant stakeholders include the lay health workers themselves, patients and their families/carers, the general public, policy makers, programme managers, other health workers, and any others directly involved in or affected by the programme.

Setting criteria for inclusion: Intervention

Effectiveness of LHW interventions

- Any intervention delivered by LHWs and intended to improve maternal and child health care (MCH) for
- Child health: children aged less than five years;
- maternal health: health care aimed at improving reproductive health, ensuring safe motherhood, or directed at women in their role as carers for children aged less than five years.

Implementing LHW programmes

- Programmes that intend to improve maternal or child health and that use any type of lay health worker (paid or voluntary) including community health workers, village health workers, birth attendants, peer counsellors, nutrition workers and home visitors.

Setting criteria for inclusion:

Primary Outcomes

Effectiveness of LHW interventions

- 1. Health behaviours, such as the type of care plan agreed, and adherence to care plans (medication, dietary advice etc.)
- 2. Healthcare outcomes as assessed by a variety of measures. These included mortality; physiological measures (e.g vitamin C levels); and participants' self reports of symptom resolution, quality of life, or patient self-esteem
- 3. Harms or adverse effects

Implementing LHW programmes

- Phenomena of interest rather than 'outcome': The review will include studies where the phenomenon of interest is a description and interpretation of the experiences and attitudes of stakeholders towards lay health worker programmes.

Plan for searching

Effectiveness review

- List of sources, including
 - Electronic databases
 - Grey literature
 - Author contact
- Search terms and filters
- Date and language limits

Qualitative evidence synthesis

- Priority of sources may differ. For example, grey literature may provide richer descriptions of the phenomenon, and author contact may be more critical to address thinness of reporting

Search strategies

Effectiveness LHW interventions

- Cochrane Central Register of Controlled Trials (including citations uploaded from the EPOC and the CCRG registers)
- MEDLINE & MEDLINE In-Process & Other Non-Indexed Citations, EMBASE; AMED; British Nursing Index and Archive; (CINAHL, Ebsco; POPLINE; WHOLIS; Science Citation Index and Social Sciences Citation Index (ISIWeb of Science)
- reference lists of all included papers and relevant reviews
- study authors and researchers in the field for additional papers.

Qualitative evidence synthesis

- Same strategy and terms, but filter for RCTs removed
- Will use filters for qualitative studies, choosing the “specificity” alternative for MEDLINE and the “Qualitative - Best balance” alternative for CINAHL. When searching the British Nursing Index (Table 3), we will use terms based on the MEDLINE methods filter.

Selection of studies

Effectiveness review

- Titles and abstracts screened for relevance by more than one reviewer
- Full text retrieved for relevant articles
- Independently assessed based on inclusion criteria

Qualitative evidence synthesis

- Relevance may be interpreted more broadly, and in situations where relevance is uncertain, studies may be placed in a holding pile and returned to later

Appraising study quality

Effectiveness review

- Risk of bias appraised using standard critical appraisal tools appropriate to the study design that look at:
 - Sequence generation.
 - Concealment of allocation.
 - Blinding of outcome assessors.
 - Incomplete data.
 - Selective outcome reporting.
 - Other potential sources of bias.

Qualitative evidence synthesis

- Bias is not always an issue in qualitative research
- Different criteria for quality exist across different types of qualitative designs
- A qualitative appraisal tool may be used, but most tools tend to appraise completeness of reporting rather than methodological quality

Appraising risk of bias

Effectiveness of LHW interventions

- Use approach recommended by The Cochrane Collaboration for assessing risk of bias in studies included in Cochrane reviews (Higgins 2008)

Implementing LHW programmes

- Appraisal will be performed using an adaptation of the Critical Appraisal Skills Programme (CASP) quality assessment tool for qualitative studies (CASP 2006) to judge relative contribution of each study

Qualitative Health Research

<http://qhr.sagepub.com/>

A Comparative Analysis of Three Online Appraisal Instruments' Ability to Assess Validity in Qualitative Research

Karin Hannes, Craig Lockwood and Alan Pearson
Qual Health Res 2010 20: 1736 originally published online 29 July 2010
DOI: 10.1177/1049732310378656

The online version of this article can be found at:

<http://qhr.sagepub.com/content/20/12/1736>

Assessment of heterogeneity

Effectiveness review

- Possible heterogeneity identified from the scoping review
- Assessed using statistics for heterogeneity
- Sensitivity analysis performed to assess difference in results when studies are grouped by quality, bias etc

Qualitative evidence synthesis

- Heterogeneity can be documented, but cannot be subjected to statistical analysis
- Heterogeneity can be an essential part of the phenomenon of interest and used to identify patterns and develop theory
- Sensitivity analysis performed to assess whether findings are appreciably different when less well-reported or relevant studies are excluded.

Data synthesis

Effectiveness review

- Studies usually grouped according to similarities in population, intervention and outcomes

Qualitative evidence synthesis

- A range of qualitative methods now exist, including thematic analysis, framework analysis, metanarrative, meta-ethnography
- Reviewers must justify their choice of method

Data synthesis

Effectiveness of LHW interventions

- No a priori grouping of studies
- Studies grouped within the review by type of health issue

Implementing LHW programmes

- Thematic analysis approach, which 'may be particularly appropriate where evidence is likely to offer only thin description and is likely to be largely descriptive as opposed to highly theorised or conceptual.'

To sum up

**“What you see, is what you get.”
→ TRANSPARANCY!**

**“Shed light where there has been no
light before.” → ILLUMINATION!**



It is all about mixing apples with oranges

Karin.Hannes@ppw.kuleuven.be
KU Leuven

Methodology for Educational Sciences
Research Group

Faculty of Psychology and Educational Sciences
Andreas Vesaliusstraat 2
3000 Leuven
Belgium

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