

Synthesis of qualitative research

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What is qualitative evidence synthesis (QES)?

The synthesis or amalgamation of individual qualitative research reports that relate to a specific topic or focus in order to arrive at new or enhanced understandings about the phenomenon under study/review.



The purpose of synthesising qualitative research

- To integrate evidence from primary qualitative studies in order to develop **new cumulative knowledge**
- Not simply aggregating studies as has been more traditional in a narrative review of qualitative research



What type of questions can a QES answer?

QES

- How do people experience illness or challenging life circumstances?
- What are the barriers and facilitators to accessing healthcare?
- What impact do specific barriers and facilitators have on people, their experiences and behaviors?

Linked to a review of nursing interventions

- Why does an intervention work (or not), for whom and in what circumstances?
- How is an intervention experienced by all of those involved in developing, delivering or receiving it?
- What aspects of the intervention they value, or not; and why this is so?
- Which factors facilitate or hinder successful implementation of a program, service or treatment?
- How does a particular intervention needs to be adapted for large-scale roll-out (Roen 2006)?

Chapter 20: Qualitative research and Cochrane reviews

What kind of questions have been addressed?

- What constitutes quality end of life care?
- Patient adherence to tuberculosis treatment
- Adapting to and managing diabetes
- Patients' help-seeking experiences and delay in cancer presentation
- The experience of physical restraint
- Development of a user-focused stroke service in primary care

What might this have to offer?

- Can identify outcomes that are not seen as important in a single qualitative study
- More powerful explanation than is possible in a single qualitative study
- Can refute or revise current understanding of a particular phenomenon
eg leg ulceration, chronic not acute condition

What might this have to offer?

- Can identify gaps in the evidence and reveal future research priorities
- Complement findings of effectiveness reviews
- Help inform complex interventions eg
 - intervention complexity
 - context and failure of implementation
 - health systems issues
 - issues with fidelity, dose, reach, equity, process and outcomes

can all be explored with qualitative evidence to try and ascertain what happened in a positive, negative or neutral way

Methodologies for Qualitative Synthesis

Umbrella terms

- Qualitative Systematic Reviews
- Qualitative Evidence Synthesis
- Qualitative Meta-Synthesis
- Qualitative Research Synthesis



Methods for QES

- Vary depend on the methodology chosen for the review
- Many are developed from methods associated with primary qualitative research eg
 - thematic analysis
 - theme extraction
 - constant comparative method
 - coding

For more detail see: Booth, Noyes, Flemming et al (2016) p16

(Some) Specific methodologies (there are more!)

- Meta-Ethnography (1988)
- Thematic synthesis (2008)
- Framework synthesis (2008)
- Narrative Synthesis (2002)
- Realist Synthesis (2002)
- Meta-Narrative review (2005)
- Critical Interpretative Synthesis (2006)
- Qualitative Interpretive Meta-Synthesis (2013)

The procedure

1. A clearly stated set of objectives with pre-defined eligibility criteria for studies (**not necessarily fixed throughout the review process**).
2. An explicit, transparent methodology (**not necessarily linear in nature**).
3. A well defined, systematic search that attempts to identifies studies that meet the eligibility criteria (**not necessarily exhaustive in nature**).
4. An assessment of the methodological quality of the findings of the included studies, or at least a statement on why such a quality assessment has not been conducted or how the author deals with quality issues (**not necessarily with a focus on risk of bias**).
5. A systematic extraction, synthesis, and presentation of the characteristics and findings of the included studies.

Guidance on choosing a method for qualitative evidence synthesis published in 2016

Booth A, Noyes J, Flemming K, et al (2016) Guidance on choosing qualitative evidence synthesis methods for use in health technology assessments of complex interventions

Available from: <http://www.integratehta.eu/downloads/>

Guidance on choosing qualitative evidence synthesis methods for use in health technology assessments of complex interventions

7

AUTHORS: Andrew Booth, Jane Noyes, Kate Flemming, Ansgar Gerhardus, Philip Wahlster, Gert Jan van der Wilt, Kati Mozygamba, Pietro Refolo, Dario Sacchini, Marcia Tummers, Eva Rehfues



Choice of methods: Different approaches to QES

Three key methods recommended by CQIMG for undertaking a QES with the intention of integrating it with an effect review:

- Thematic synthesis
- Framework synthesis/best fit framework synthesis
- Meta-ethnography

Thematic synthesis

- Thematic synthesis can develop either descriptive or analytic themes
- One of the most accessible forms of synthesis
- Can be used with ‘thin’ data to produce descriptive themes
- Where ‘thicker’ data are available, more in-depth analytic themes can be developed
- Themes can then be integrated within an effectiveness review
- May be limited in interpretative power
- Can provide insight from qualitative to supplement the quantitative



Cochrane
Library

Cochrane Database of Systematic Reviews

Parents' and informal caregivers' views and experiences of communication about routine childhood vaccination: a synthesis of qualitative evidence (Review)

Ames HMR, Glenton C, Lewin S

Framework synthesis and Best-fit framework synthesis

- A good choice of QES method due to the extent of the complexity the method can accommodate
- Framework allows a clear mechanism for integration of qualitative and quantitative evidence in an aggregative way
- Frameworks can derive from a pre-existing review, from a conceptual model, from a policy framework or from a logic model
- Requires identification and justification for the selection of the framework
- Risk of simplistically forcing data into a framework



← Qualitative evidence synthesis

Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis (Review)

Glenton C, Colvin CJ, Carlsen B, Swartz A, Lewin S, Noyes J, Rashidian A



Systematic review of effectiveness →

Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases (Review)

Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, Odgaard-Jensen J, Johansen M, Aja GN, Zwarenstein M, Scheel IB

Meta-ethnography

- An explicitly interpretative approach to synthesis and aims to create new understandings and theories from a body of work
- Leads to the creation of descriptive or high order constructs which can help understanding of the interventions within an effectiveness review, particularly where those interventions are complex
- Takes time and experience and requires data within the primary studies to be 'thick' enough

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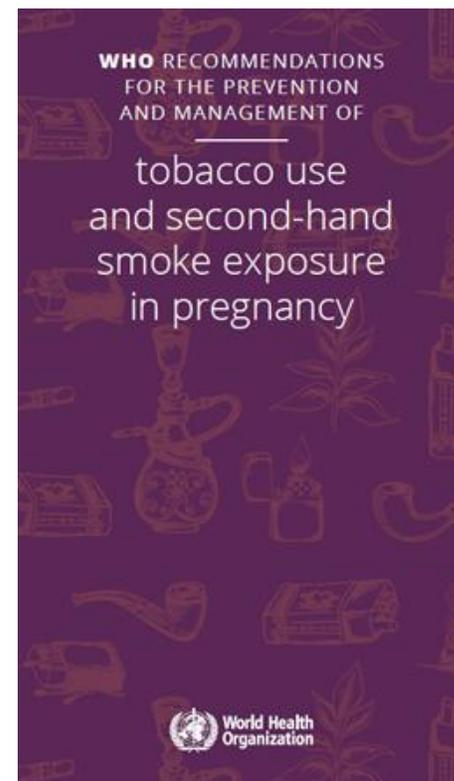
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REVIEW PAPER

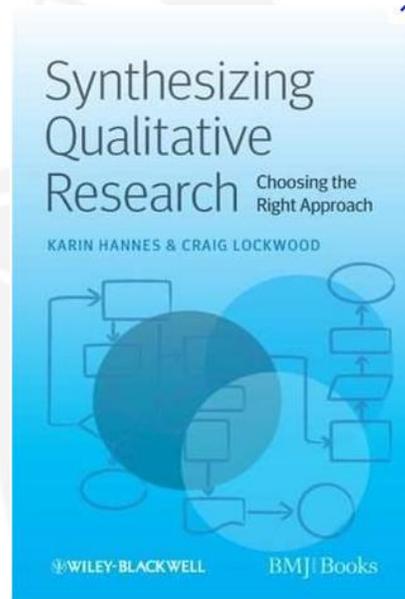
Smoking in pregnancy: a systematic review of qualitative research of women who commence pregnancy as smokers

Kate Flemming, Hilary Graham, Morag Heirs, Dave Fox & Amanda Sowden

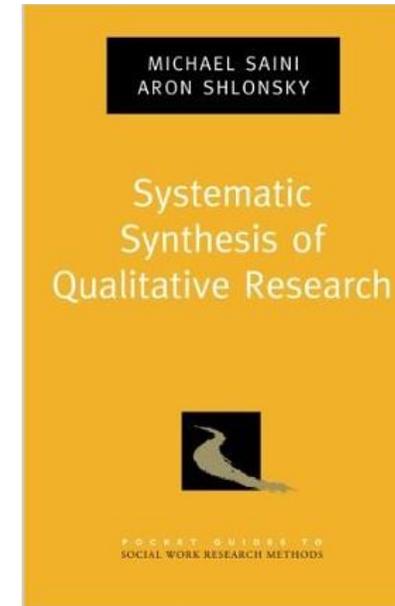
Accepted for publication 17 November 2012



Useful resources



Karin Hannes and Craig Lockwood (eds) (2012)
Synthesizing Qualitative Research: Choosing the Right Approach J Wiley – Blackwell



Michael Saini & Aron Shlonsky (2012)
Systematic Synthesis of Qualitative Research (Pocket Guides to Social Work Research Methods) OUP USA

Key references

CQIMG Guidance Series

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- Noyes J, Booth A, Flemming K, Garside R, Harden A, Lewin S, Pantoja T, Hannes K, Cargo M, Thomas J. (2018) Cochrane Qualitative and Implementation Methods Group Guidance paper 2: Methods for assessing methodological limitations, data extraction and synthesis, and confidence in synthesized qualitative findings, *Journal of Clinical Epidemiology* doi: 10.1016/j.jclinepi.2017.06.020.
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- Flemming K, Booth A, Hannes K, Cargo M, Noyes J. (2018) Cochrane Qualitative and Implementation Methods Group Guidance Paper 6: Reporting guidelines for qualitative, implementation and process evaluation evidence syntheses, *Journal of Clinical Epidemiology* doi: 10.1016/j.jclinepi.2017.10.022.

RETREAT

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