Searching for qualitative evidence

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The CQIMG Search Guidance Triptych

The Guidance	The Detail (SG2, SG4, SG6)	The Evidence Base
Noyes J, Booth A, Cargo M, et al. Chapter 21: Qualitative evidence. In: Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA (editors). *Cochrane Handbook for Systematic Reviews of Interventions* version 6.1 (updated September 2020). Cochrane, 2020. Available from www.training.cochrane.org/handbook .	Harris JL, Booth A, Cargo M, et al. Cochrane Qualitative and Implementation Methods Group guidance series-paper 2: methods for question formulation, searching, and protocol development for qualitative evidence synthesis. *Journal of Clinical Epidemiology* 2018; 97: 39-48. Also **Paper 4** for Process Evaluations; **Paper 6** Reporting	Booth, A. (2016). Searching for qualitative research for inclusion in systematic reviews: a structured methodological review. Systematic reviews, 5(1), 74. **7S framework** – **S**ampling, **S**ources, **S**tructured questions, **S**earch procedures, **S**trategies and filters, **S**upplementary strategies, **S**tandards for reporting

21.7 Searching for qualitative evidence

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The Context (21.7)

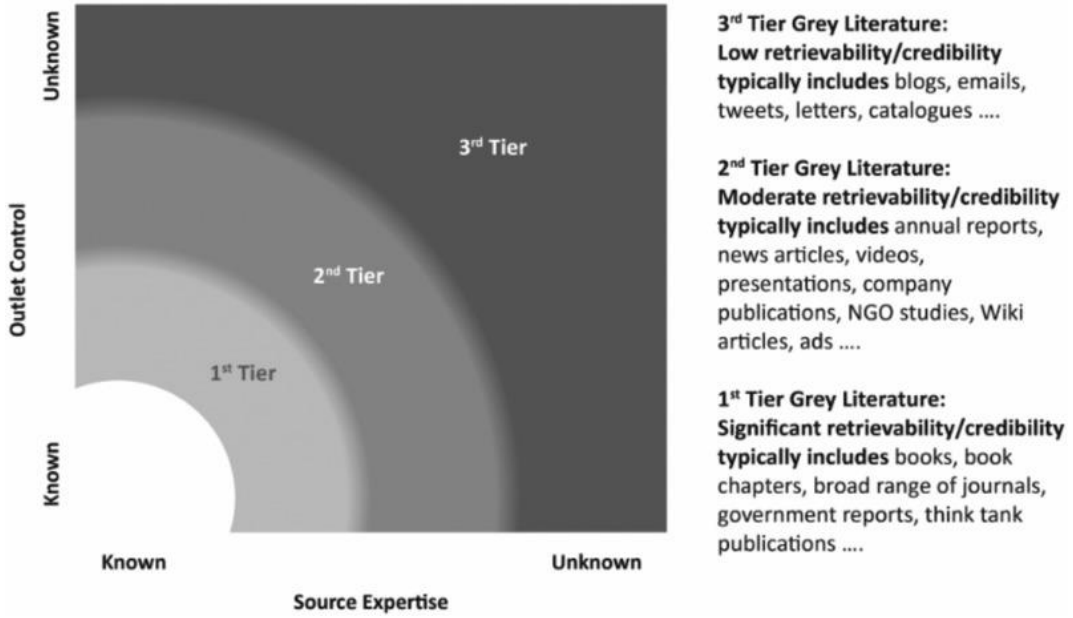
- Procedures for retrieval of qualitative research relatively under-developed.
- Particular challenges (Booth, 2016):
  - non-informative titles and abstracts
  - diffuse terminology
  - poor indexing and
  - overwhelming prevalence of quantitative studies within data sources
- When planning search, consider **7S framework** (**S**ampling, **S**ources, **S**tructured questions, **S**earch procedures, **S**trategies and filters, **S**upplementary strategies, **S**tandards for reporting) (Booth, 2016)

Sampling (21.7)

- Key decision:
  - comprehensive, exhaustive approaches (characterize quantitative searches) or
  - purposive sampling (more sensitive to qualitative paradigm) (Suri 2011).
- Purposive sampling used to generate an interpretative understanding, (e.g. generating theory – meta-ethnography or realist synthesis), draws upon theoretical sampling, maximum variation sampling and intensity sampling.

Sources (21.7)

- More likely to include
  - book chapters,
  - theses and
  - grey literature reports



Adams et al, 2016

- Search strategy should place extra emphasis on these sources.
- Maximum **core database recall** approx. 90% (2 databases = 89.1%; 3 databases = 92%; 4 databases = 93.1%). 6.9% = 1.3% across five databases + 5.6% not indexed in any of nine databases) (Frandsen et al, 2019)
- Local databases particularly valuable given criticality of **Context** (Stansfield et al 2012; Booth et al, 2019a).

Structured questions (21.5)

- SPICE, SPIDER or PerSPE©TiF (Booth et al, 2019b)

Search Procedures (21.7)

- **CLUSTER** method for tracking down **associated or sibling reports** (Booth et al 2013):

  Citations,

  Lead authors

  Unpublished materials

  [Google] **S**cholar

  Theories

  Early examples (Ancestry searching)

  Related projects

- **BeHEMoTh** approach for identifying **explicit use of theory** (Booth and Carroll 2015) [**Model* OR Theor* OR Concept* OR Framework***].

Strategies and Filters (21.7)

- Search filters for qualitative studies lack specificity of quantitative counterparts.
- Filters may facilitate efficient retrieval by study type (e.g. qualitative (Rogers et al 2018) or mixed methods (El Sherif et al 2016) or by perspective (e.g. patient preferences (Selva et al 2017))
- Particularly useful when quantitative literature is overwhelmingly large and increases Number Needed to Retrieve.

Supplementary Strategies (21.7)

- Poor indexing of qualitative studies makes **Citation Searching** (forward and backward) and **Related Articles** features particularly useful (Cooper et al 2017).
- **Supplementary strategies uniquely identified 5 qualitative studies**: 3 studies of good quality, one moderate quality, and one excluded from synthesis due to poor quality.
- **All 4 included qualitative studies made significant contributions to synthesis** (Cooper et al, 2018).

Reporting Standards (SG6)

- Some authors focus on reporting individual aspects of synthesis (e.g. searching). Many QES “offered no defense of their lack of explicitness in describing their techniques of searching; nearly 40% did not describe how studies were identified at all” (Dixon-Woods et al, 2007).
- Fulfillment, or **otherwise!**, of search criteria documented. From this, mnemonic **STARLITE (Standards for Reporting Literature Searches (Sampling strategy, Type of study, Approaches, Range of years, Limits, Inclusion and exclusions, Terms used, Electronic sources)** was devised.
- STARLITE, being unfunded, is limited by not using consensual methods that constitute good practice for the development of reporting standards
- STARLITE continues to be cited to support transparency of reporting and **recommended for use with qualitative and implementation syntheses**.

ENTREQ (SG6)

3	Approach to searching	Indicate whether the search was **pre-planned (*comprehensive search strategies to seek all available studies)* or iterative (*to seek all available concepts until theoretical saturation is achieved)*.**
4	Inclusion criteria	Specify the inclusion/exclusion criteria *(e.g. in terms of population, language, year limits, type of publication, study type).*
5	Data sources	Describe the information sources used (e.g. *electronic databases (MEDLINE, EMBASE, CINAHL, psycINFO, Econlit), grey literature databases (digital thesis, policy reports), relevant organisational websites, experts, information specialists, generic web searches (Google Scholar) hand searching, reference lists)* and when the searches conducted; provide the rationale for using the data sources.
6	Electronic Search strategy	Describe the literature search *(e.g. provide electronic search strategies with population terms, clinical or health topic terms, experiential or social phenomena related terms, filters for qualitative research, and search limits)*.

Process Evaluations (Cochrane Qualitative and **Implementation** Methods Group) **(21.7.1)**

Four potential approaches to identify process evaluations.

- **Identify studies at point of study selection** (sensitive topic search without any study design filter – for a review question with multiple publication types (e.g. RCT, qualitative research and economic evaluations).
- **Restrict process evaluations to those conducted within RCTs** (using standard search filters - see Chapter 4, Section 4.4.7).
- **Use unevaluated filter terms** (e.g. 'process evaluation', 'program(me) evaluation', 'feasibility study', 'implementation', 'proof of concept' etc) [Experimental]. Need to develop and test such filters. Filters derived from study type (process evaluation), data type (process data) or application (implementation) (Robbins et al 2011).
- **Rely on citations-based approaches** to identify linked reports, published or unpublished (Booth et al 2013 - CLUSTER) with implementation or process data (Bonell et al 2013).
- Detailed guidance in **SG4** (Cargo et al 2018).

Updated references - 1

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- Booth, A., Mshelia, S., Analo, C. V., & Nyakang'o, S. B. (2019a). Qualitative evidence syntheses: Assessing the relative contributions of multi-context and single-context reviews. *Journal of Advanced Nursing*, 75(12), 3812-3822.
- Booth A, Noyes J, Flemming K, Moore G, Tuncalp Ö, Shakibazadeh E. (2019b) Formulating questions to address the acceptability and feasibility of complex interventions in qualitative evidence synthesis. *BMJ Global Health*; 4: e001107.
- Cargo M, Harris J, Pantoja T, Booth A, Harden A, Hannes K, Thomas J, Flemming K, Garside R, Noyes J. Cochrane Qualitative and Implementation Methods Group guidance series-paper 4: methods for assessing evidence on intervention implementation. *Journal of Clinical Epidemiology* 2018; 97: 59-69. **[SG4]**

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- Cooper, C, Lovell, R, Husk, K, Booth, A, Garside, R. (2018) Supplementary search methods were more effective and offered better value than bibliographic database searching: A case study from public health and environmental enhancement. *Res Syn Meth*. 9: 195– 223. https://doi.org/10.1002/jrsm.1286
- Flemming K, Booth A, Hannes K, Cargo M, Noyes J (2018) Cochrane Qualitative and Implementation Methods Group guidance series-paper 6: reporting guidelines for qualitative, implementation, and process evaluation evidence syntheses. *Journal of Clinical Epidemiology*; 97: 79-85. **[SG6]**
- Frandsen, T. F., Gildberg, F. A., & Tingleff, E. B. (2019). Searching for qualitative health research required several databases and alternative search strategies: a study of coverage in bibliographic databases. *Journal of Clinical Epidemiology*, *114*, 118-124.