Developing a reporting guideline to improve meta-ethnography in health research: the eMERGe mixed-methods study

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Declared competing interests of authors: Jane Noyes reports partial reimbursement of travel and subsistence expenses to attend meetings to develop Confidence in the Evidence from Reviews of Qualitative Research (CERQual) from the World Health Organization, Alliance for Health Systems and Policy, Norad and Cochrane during the conduct of the study; reports partial reimbursement for travel expenses for co-chairing the Cochrane Methods Executive and membership of the Scientific Committee from Cochrane outside the submitted work; has two patents licensed for CERQual and the iCAT_SR tool, both of which were released under the Creative Commons License; and is a member of the National Institute for Health Research Dissemination Centre Advisory Group.

Published February 2019
DOI: 10.3310/hsdr07040

Scientific summary

The eMERGe mixed-methods study
Health Services and Delivery Research 2019; Vol. 7: No. 4
DOI: 10.3310/hsdr07040

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Background

Meta-ethnography is a widely used and thorough qualitative synthesis method in which researchers select, analyse and interpret qualitative studies to answer focused questions on a specific topic (e.g. people’s experiences of having, and being treated for, arthritis). Meta-ethnography is suited to developing theory and can lead to new conceptual understandings of complex health-care issues.

Findings from high-quality meta-ethnographies have been used in clinical guidelines. However, the reporting quality of published meta-ethnographies varies and is often poor. The analytic synthesis process is particularly poorly described. Users of research evidence need clear reporting of the methods, analysis and findings to be able to assess, use and have confidence in the output of meta-ethnographies. A generic guideline for reporting qualitative evidence synthesis exists. However, meta-ethnography has unique, complex analytic synthesis processes that are not covered by the generic guideline, and bespoke guidelines are required to improve the completeness and clarity of meta-ethnography reporting.

A systematic, mixed-methods approach is recommended for good practice in developing reporting guidance including literature reviews, workshops involving methodological experts, consensus studies, and developing a guidance statement and an accompanying explanatory document. The meta-ethnography reporting guidance (eMERGe) project followed this approach to create evidence-based meta-ethnography reporting guidance.

Objectives

The eMERGe project aimed to create evidence-based meta-ethnography reporting guidance, by answering the following research questions:

- What are the existing recommendations and guidance for conducting and reporting each process in a meta-ethnography, and why?
- What good practice principles can we identify in meta-ethnography conduct and reporting to inform recommendations and guidance?
- From these good practice principles, what standards can we develop in meta-ethnography conduct and reporting to inform recommendations and guidance?
- What is the consensus of experts and other stakeholders on key standards and domains for reporting meta-ethnography in an abstract and main report/publication?

Methods of guidance development

The project included four key stages, conducted by the project team, in consultation with one of the originators of meta-ethnography, Professor George Noblit, and supported by a Project Advisory Group of national and international academics, policy experts and lay advisors who had an active role in the development of the guidance and whose contribution was central throughout the project.

Stage 1 involved a systematic review of methodological guidance using comprehensive literature searches, from which we identified good practice principles and recommendations for conducting and reporting meta-ethnographies.
Stage 2 involved a review and audit of published meta-ethnographies. There were three parts to this stage of the project: (2.1a) documentary analysis of a sample of both seminal and poorly reported published meta-ethnographies, (2.1b) exploration of professional end-user views on the utility of seminal and poorly reported meta-ethnographies for policy and practice and (2.2) an audit of published health- or social care-related meta-ethnographies to identify the extent to which they met the good practice principles and recommendations identified in stages 1, 2.1a and 2.1b.

Stage 3 involved finding consensus on the reporting items through an online workshop and two identical eDelphi (Version 1, Duncan E, Swinger K, University of Stirling, Stirling, UK) consensus studies that were run in parallel: one with meta-ethnography method expert participants and another with key stakeholders who use synthesised evidence (i.e. professional evidence users and patient and public representatives). These groups were separated, as each brings specific expertise and could have potentially different views on the importance of specific items.

Stage 4 covered the development of the guidance table, reporting criteria, explanatory notes and extensions to the guidance, along with training materials to support the use of the guidance. This process was iterative, and involved input from the project team and the wider Project Advisory Group.

Results

Fifty-seven papers that gave methodological guidance about meta-ethnography reporting or conduct were included in the stage 1 systematic review. The analysis of these papers identified that more clarity is required in reporting the methods for selecting a qualitative evidence synthesis methodology, and in how the reading, translation and synthesis phases (4–6) of meta-ethnography are conducted.

The documentary analysis of 29 seminal and poorly reported meta-ethnographies (stage 2.1a), together with the interviews of potential end-users of meta-ethnographies (stage 2.1b), enabled us to identify good practice principles and contributed towards our development of standards in the reporting of meta-ethnographies.

From the results of stages 1, 2.1a and 2.1b, we identified good practice principles and standards that we then developed into an audit tool of 109 measurable provisional standards. After applying these standards to 19 published meta-ethnography papers in an audit, we reviewed and refined the provisional standards to create 69 reporting items for the eDelphi studies.

Sixty-two people (39 experts and 23 professional/lay people) completed all three rounds of the eDelphi studies (stage 3). Four items failed to reach consensus in both eDelphi studies and so were excluded from the final guidance. Participants reached consensus that 65 out of 69 items should be included in the guidance.

The final reporting criteria for the guidance were developed from the 65 items that met consensus in the eDelphi studies. A small writing group was formed to write the guidance table and explanatory notes. During the writing process, the writing group sought regular feedback from the wider project team and the Project Advisory Group. The guidance was developed through a series of iterations, with feedback being sought on specific issues, namely the structure of the guidance, merging related items, readability and usability of the guidance, and checking against the eDelphi items. Members of the Project Advisory Group and project team reviewed and agreed the final guidance table and explanatory notes.

The project team developed training materials to support use of the guidance, including four short films about meta-ethnography reporting and a webinar about how to use the guidance material. The training material is freely available online at www.emergeproject.org (accessed 26 March 2018).
**Conclusions**

The eMERGe meta-ethnography reporting guidance has been developed following a rigorous and systematic mixed-methods approach, as recommended in guidelines for developing health research reporting guidelines. The guidance was developed to improve the clarity and completeness of meta-ethnography reporting, and to maximise the value and utility of meta-ethnography for informing policy and practice decisions. In future, the guidance may need to be refined or updated to encompass methodological advances and accommodate changes identified after evaluation of the impact of the guidance.

**Study registration**

This study is registered as PROSPERO CRD42015024709 for the stage 1 systematic review.
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This report
The research reported in this issue of the journal was funded by the HS&DR programme or one of its preceding programmes as project number 13/114/60. The contractual start date was in June 2015. The final report began editorial review in July 2017 and was accepted for publication in October 2017. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HS&DR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

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