The Synthesis of Qualitative Findings

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Qualitative Research Findings as Evidence for Practice

- Qualitative evidence is of increasing importance in health services policy, planning and delivery.

- It can play a significant role in:
  - understanding how individuals / communities perceive health, manage their own health and make decisions related to health service usage;
  - increasing our understandings of the culture of communities and of health units;
  - Informing planners and providers;
  - evaluating components and activities of health services that cannot be measured in quantitative outcomes.

Application of Qualitative Research to Practice

- As with quantitative research, results from a single study only should not be used to guide practice
- The findings of qualitative research should be synthesized in order to develop recommendations for practice
- However, how this should be done is highly contested.

Meta-synthesis of Qualitative Evidence: approaches

Approach	Purpose	Evidence of Interest	Search Strategy	Critical Appraisal	Data Extraction	Method of Synthesis	Outcome	Software Available
Narrative Synthesis	To summarise two or more papers in narrative form	Generic	Unspecified/ Selective	Not specified	Not Specified	Unspecified	Review article-type report	NO
Meta-ethno-graphy	The generate new knowledge /theory use processes of interpretation	Findings of qualitative research studies	Not comprehen-sive or exhaustive; seeks saturation – theoretical sampling	Opposed; all studies included as each may provide insight into the phenomena of interest	Extraction of key concepts	Refutation-al synthesis; Reciprocal translation; Line of argument synthesis.	Higher order interpretat-ion of study findings	NO (Although QARI can be used)

Approach	Purpose	Evidence of Interest	Search Strategy	Critical Appraisal	Data Extraction	Method of Synthesis	Outcome	Software Available
Realist Synthesis	To develop and test program theories	Generic; but more suited to qualitative research studies	Not comprehen-sive or exhaustive; seeks saturation	Not specified	Extracts positive and negative mechanisms/strategies that influence change	Tacit testing of implicit theories; building theory.	A transfer-able theory on "what works, for whom, in which circum-stances"	NO
Thematic analysis	To aggregate findings of 2 or more studies	Findings of qualitative research studies	Not comprehen-sive or exhaustive; seeks saturation – theoretical sampling	Not specified	Extracts of major/recurrent themes in literature	Aggregation of themes/ metaphors/ categories	A summary of findings of primary studies under thematic headings	NO (Although QARI can be used

Approach	Purpose	Evidence of Interest	Search Strategy	Critical Appraisal	Data Extraction	Method of Synthesis	Outcome	Software Available
Content analysis	To analyse then summarise content of papers.; occurrences of each theme counted and tabulated	Generic	Usually comprehen-sive with predeterm-ined search strategy	Not specified	Content extracted then coded using extraction tool designed to aid reproducibility	coded data categorised under thematic headings; also counted and tabulated	A summary of findings, and their rate of occurrence, of primary studies under thematic headings	YES
Meta-synthesis/ Meta-aggregation	To aggregate the findings of included studies	Findings of qualitative research studies	Comprehen-sive; detailed search strategy at protocol stage required	Required, using standard-ised critical appraisal instrument	Extraction of findings PLUS data that gives rise to finding using data extraction instrument	Aggregation of findings into categories; and of categories into synthesised findings	Synthesised findings that inform practice or policy in the form of a standardise d chart	YES

Meta-synthesis: worked examples

Meta aggregation

Meta ethnography

The JBI Position

- Methods applied during the systematic review of qualitative evidence should firstly be congruent with the universally accepted process of systematic review.

- The characteristics of a systematic review might be debated in terms of the detail, but there is general acceptance of a series of steps, stages or processes.

- There are two dominant approaches – Meta-Ethnography and Meta-Aggregation.

Meta aggregation

- A structured and process driven approach to systematic review drawing on the classical understandings and methods associated with systematic review of quantitative literature as practiced by the Cochrane Collaboration

Meta aggregation

- Based on an a-priori protocol
  - Established, answerable question
  - Explicit criteria for inclusion
  - Documented review methods for searching, appraisal, extraction and synthesis of data

Meta aggregation

- Explicitly aligned with:

  - Philosophy of pragmatism

    - Delivers readily useable findings

    - Informs decision making at the clinical or policy level

  - Transcendental phenomenology

    - Looks for common or "universal" essences of meaning

    - Attempts to "bracket" pre-understandings of the reviewer

Transcendental Phenomenology

- Based on the philosophic traditions of Husserlian phenomenology:
  - the intuitive examination of essences that have immediate validity;
  - Seeks to avoid undue influence of the reviewer on the text;
  - Seeks to generate practice level theory that has explanatory power for policy or practice
  - Seeks to preserve the intended meaning of text

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A systematic review of the experiences of caregivers in providing home-based care to persons with HIV/AIDS in Africa

Patricia McInerney and Petra Brysiewicz (2009), Int J Evid Based Healthcare; 7(4): 130-153

Inclusion Criteria

- The review considered studies in which family members were the primary informal caregivers of a person living with HIV/AIDS (adults and children) in Africa as well as studies in which informal caregivers (volunteers) from the community provided home-based care to persons living with HIV/AIDS in Africa;

- The phenomena of interest were the experiences of caregivers' in delivering home-based care to people living with HIV/AIDS; and

- the types of data included experiential accounts of caregivers.

Methods

- Each paper was assessed independently by two reviewers for methodological quality. The internal validity (quality) of research papers was assessed using the Joanna Briggs Institute's Qualitative Assessment and Review Instrument and the authenticity of opinion papers was assessed using the Joanna Briggs Institute's Narrative, Opinion, and Text Assessment and Review Instrument.

- There were no disagreements between the two reviewers and therefore a third reviewer was not required.

Results

- A total of 32 papers were retrieved.

- Of these, 14 were included in the review with nine being qualitative research papers and the remaining five being opinion or text papers.

- Of the nine papers that were critically appraised using the JBI-QARI critical appraisal tool, three were excluded because of poor or incomplete descriptions of the methodology.

- The findings of the remaining six papers were extracted and used in the metasynthesis

Results (cont/…)

- A total of 29 findings were extracted from the included qualitative papers

- These findings were aggregated into four categories on the basis of similarity of meaning.

- The categories were synthesised to generate one synthesised finding.

Burden of caring

Challenges in caring
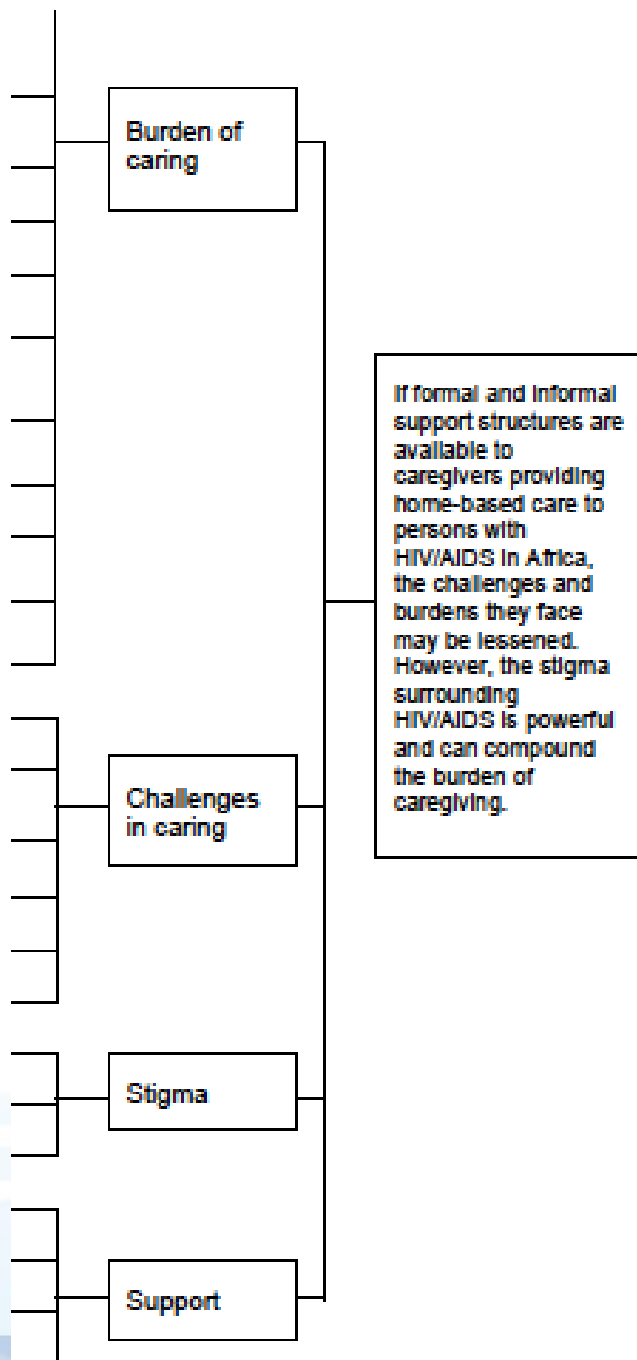
If formal and informal support structures are available to caregivers providing home-based care to persons with HIV/AIDS in Africa, the challenges and burdens they face may be lessened. However, the stigma surrounding HIV/AIDS is powerful and can compound the burden of caregiving.

Stigma

Support

"The challenges and burdens of caregivers in providing home-based care to HIV/AIDS clients in Africa may either be lessened by formal or informal support structures or be aggravated by the stigma surrounding HIV/AIDS."

Recommendations arising

- Aggregative synthesis seeks to present rather than re-analyse the evidence, therefore, it is a robust technique for informing decision making in health care practice

- Recommendations for practice can be developed from aggregative review findings as they maintain representativeness with the primary literature

Recommendations

– The findings illustrate the burden felt by the caregivers in providing home-based care to persons with HIV/AIDS, and the need for the implementation of formal or informal support structures for the caregivers.

– Healthcare professionals implementing such support programs need to address a variety of issues namely psychological support for the caregiver, poverty alleviation, caregiver level of knowledge and cultural issues.

– These support structures also need to be aware that the caregiving experience may be aggravated by the stigma surrounding HIV/AIDS.

Meta-Ethnography

- Explicitly aligned with philosophy of interpretivism

- Searches for new meaning

- Focuses on multiple realities

Hermeneutic Interpretivism

- Is the basis for meta-ethnography
  - Interpretation of text for its inner meaning
  - Focuses on the reviewers interpretive skills
  - Seeks to re-interpret the published literature
  - Seeks to generate new, mid level theoretical explanations
  - Seeks engagement between reviewer and text

Meta ethnography

- From within the social sciences to develop theories from existing ethnographic data,

- Iterative development of emic interpretations,

- Incorporates 7 phases, these can be aligned to the systematic review process, but there is no requirement to do so.

Meta ethnography

- Identify the research interest
- Decide which studies to include
- Read the studies
- Determine how the studies are related
- Translate the studies in to each other
- Synthesize the translations
- Express the synthesis

Meta ethnography: 3 stages of synthesis

- First order interpretations
  - Themes, metaphors or concepts identified
- Second order interpretations
  - The researchers interpretation of how the identified concepts relate to each other
- Third order interpretations
  - Seeks to encompass themes within each other

Interpretation

Second Order Interpretation:

- Reciprocal
  - Like interpretations are brought together "this one is like that one.."

- Refutational
  - Competing discourses; must also have a relationship that can be explored

Third Order Interpretation:

- Line of argument
  - Asks what do the parts infer about the whole

Patient adherence to Tuberculosis treatment

Salla A. Munro, Simon A. Lewin, Helen J. Smith, Mark E. Engel1, Atle Fretheim, Jimmy Volmink.
'Patient Adherence to Tuberculosis Treatment: A Systematic Review of Qualitative Research'.

PLoS Medicine July 2007.

Inclusion criteria

- Patients, carers or health professionals delivering DOTs

- Perceptions of adherence was the phenomena of interest

- Context was patients undergoing DOTs therapy for TB

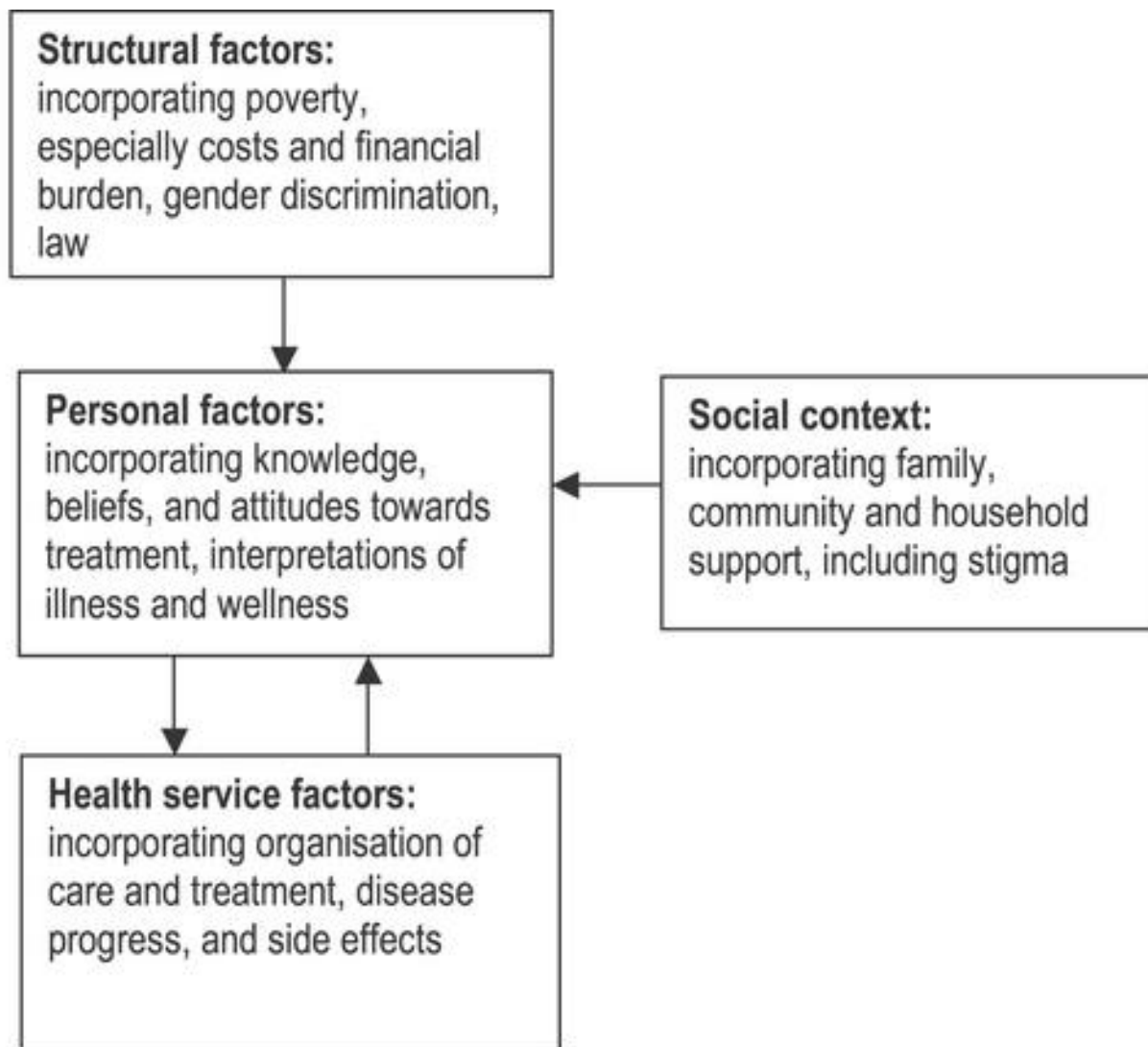- Qualitative studies on the perception of adherence

Methods

- Studies were assessed using a checklist

- Data extracted using a standardized form

- Synthesis was reciprocal and line of argument

Results

- Following screening, 44 papers were included
- First order interpretations 8
- Second order interpretations 6
- Third order interpretations 4
- Expression of the synthesis: visual model

Structural factors: incorporating poverty, especially costs and financial burden, gender discrimination, law

Personal factors: incorporating knowledge, beliefs, and attitudes towards treatment, interpretations of illness and wellness

Social context: incorporating family, community and household support, including stigma

Health service factors: incorporating organisation of care and treatment, disease progress, and side effects
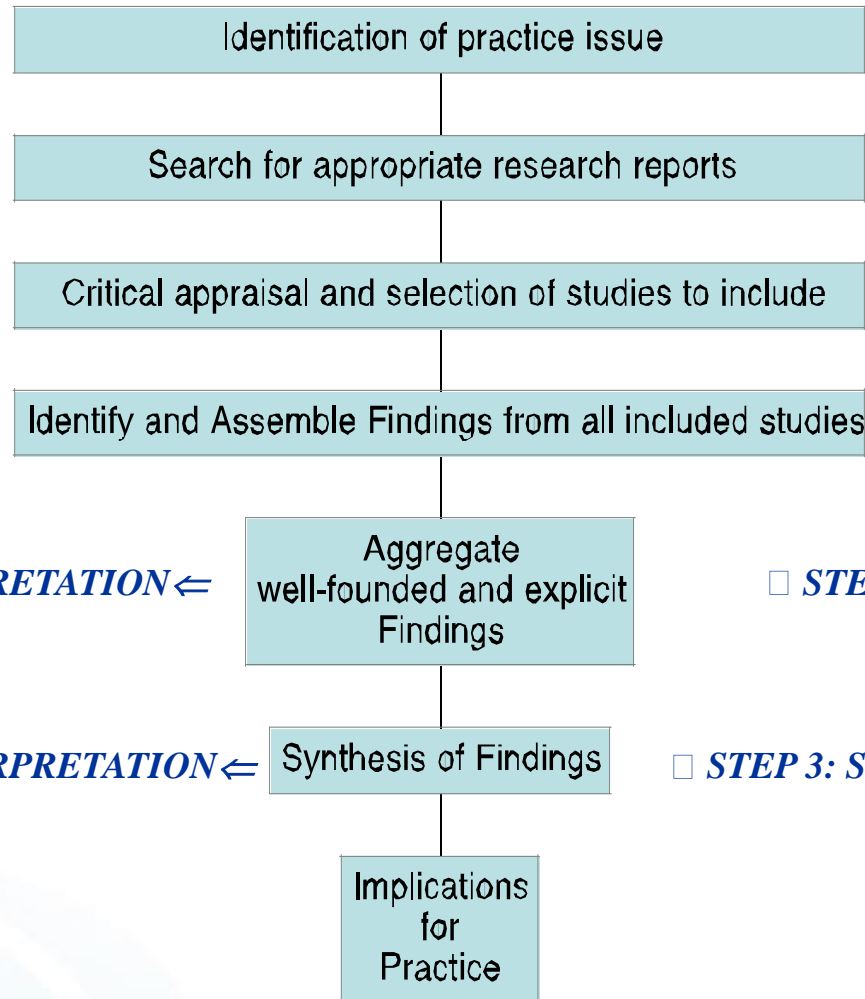
Note:

↓ ↑ suggest a bi-directional relationship between factors. For example, health service interventions directed at patients are likely to influence patient adherence behaviour through the filter of "personal factors." Similarly, patients' interactions with health services are likely to be influenced by their knowledge, attitudes, and beliefs about treatment as well as their interpretations of illness and wellness.

Recommendations

- Increase visibility of TB programs in the community, which may increase knowledge and improve attitudes towards TB

- Provide more information about the disease and treatment to patients and communities

- Increase support from family, peers, and social networks

- Minimize costs and unpleasantness related to clinic visits. Increase flexibility/ patient autonomy

METASYNTHESIS OF QUALITATIVE RESEARCH STUDIES

Identification of practice issue

Search for appropriate research reports

META ETHNOGRAPHY

Critical appraisal and selection of studies to include

QARI METAGGREGATION

FIRST ORDER ANALYSIS ⇐

Identify and Assemble Findings from all included studies

SECOND ORDER INTERPRETATION ⇐

Aggregate well-founded and explicit Findings

☐ *STEP 2: CATEGORIES*

THIRD ORDER INTERPRETATION ⇐

Synthesis of Findings

☐ *STEP 3: SYNTHESISED FINDINGS*

Implications for Practice

Aggregation or Interpretation?

- Aggregation

- Interpretation