QUALITATIVE DATA ANALYSIS

Malin Eriksson
PHD, Senior lecturer
Epidemiology and Global Health
Umeå University, Sweden
Malin.eriksson@epiph.umu.se
ISS Training Workshop: Gadjah Mada University Yogyakarta, Indonesia,
February 20-24, 2012

Outline

- Overview of thematic analysis – as a recommended tool for analysing INTREC interviews

- Exercise – thematic analysis of two interviews on "smoking"

Thematic analysis

- One of the most commonly used methods in qualitative analysis
- Accessible and flexible way of analysing qualitative data
- A method for identifying, analysing and reporting repeated themes (patterns) within a data-set
- Organize and describes data, and sometimes goes further in interpreting the research topic

Braun, V & Clarke, V (2006). Using thematic analysis in psychology, *Qual Res Psych* 3: 77-101

Thematic analysis - prerequisites

- Data familiarisation
  - Know your data!
  - Carry out data collection yourself!
- Some kind of coding of data required
  - Transcribed interviews preferable
- Analysis needs to be modified along the process…
  - Adjust earlier coding in the light of a fuller picture
- Identifying central themes might easy – interpreting the meaning of the themes harder…
  - What about…?
  - Analytical skills required
- Themes need to be exemplified
  - Quotes as illustrative examples

Thematic analysis - steps

Step	Description
1) Familiarizing with data	Repeated readings of transcripts, notes of ideas
2) Generating initial codes	Characterizing the data; a) open b) steered by research questions
3) Searching for themes	Sorting of codes; a) data driven b) Research question driven
4) Reviewing themes	Comparing codes & themes, deciding on analytical level of theme (descriptive or interpretative)
5) Defining and naming themes	Refining and defining the theme – identifying the *essence* of what the theme is about
6) Producing the report	Provide sufficient evidence of the themes within the data

What counts as a theme?

- *Captures* something *important* about the data in relation to the research questions
- Represents a *patterned* meaning in the data
- May be data-steered *or* steered by pre-determined questions / interest in relation to specific research questions

How to identify a theme?

1. Identify *themes based on open coding* of the data

    - Inductive, bottom up

    - Data driven

    - Requires open coding of the data – *what does this data tell me?*

2. **Identify codes and characteristics of *pre-determined questions***

    - Deductive, top-down

    - Driven by specific research interests

    - Code for specific research questions – *what does this data tell me about (e.g.) <u>motives for smoking?</u>*

Coding

- Giving substantive codes to segments of the text

  "Running the data (open)"

- Naming a phenomenon, an unit, a piece of information
  - Totally "open minded"
  - Steered/guided by research questions

- A way of characterizing data – what is in the data (about…)?
  - Sometimes by using the same term as in the text
  - Sometimes by using other concepts to describe what the text says

- Can be done manually or through software programs, e.g. "Open code"

Download from:
http://www.phmed.umu.se/english/divisions/epidemiology/research/open-code/

Example of open coding

Text	Open codes
R: This place is a community with good and bad things. The good thing is that we feel close to neighbors and relatives. We have peace and calm and it is safe for the children. Then another thing is that we know too much about each other. Then there is few job opportunities which is negative for the youth, they move from here.	Feeling-of-solidarity, neighborhood-spirit, Peace-and-calm, good-for-children, safety Social-control, Social-control, lack of job Lack-of-job, young move Young move, no future

Examples of *preliminary* themes & codes

Prel. THEME	Community norms	Local politics
Codes	Contempt of academics	Community before politics
	Alcohol only weekends	Conflict politics – rural settings
	Unemployed mentality	Pressure on local politicians
	Jealousy	Politics become un-politics
	Capable norm	Political fights
	Handy important	Social democratic region
	Earning money ugly	Political solidarity varies
	Helping out norm	Social democracy failure
	Don't think you are someone	Etc.
	No high culture	Etc.
	Look down on unengaged	

Analytical level of the theme

1. ## Semantic/ explicit level
   - Descriptive
   - E.g. "Strong community norms for engagement"

2. ## Interpretative / latent level
   - Interpretative
   - E.g. "Strong community norms for engagement creates community spirit"

Thematic analysis - steps

Step	Description
1) Familiarizing with data	Repeated readings of transcripts, notes of ideas
2) Generating initial codes	Characterizing the data; a) open b) steered by research questions
3) Searching for themes	Sorting of codes; a) data driven b) Research question driven
4) Reviewing themes	Comparing codes & themes, deciding on analytical level of theme (descriptive or interpretative)
5) Defining and naming themes	Refining and defining the theme – identifying the *essence* of what the theme is about
6) Producing the report	Provide sufficient evidence of the themes within the data

Exercise – thematic analysis of smoking interviews

- Data set;
  - Two interviews about "experiences of smoking"

- Research questions;
  - Pre-determined
    - a) motives for smoking
    - b) reasons to stop smoking,
    - c) barriers to stop smoking
  - Steer your coding and identification of themes (patterns)

- Result; present;
  - Codes for each question
  - Description of the essence of each themes
  - Suggestions of names of each themes

Tasks

1. Get familiar with the interviews (repeated readings)
2. Code the interviews with the pre-determined questions in mind
   1. motives for smoking
   2. reasons to stop smoking
   3. barriers to stop smoking
3. Sort the codes under each question
4. Go through the codes and try to describe "the essence" of the theme that these codes form
5. Suggest a name of each theme that captures the essence/core of the theme