Chapter 4.12: Qualitative Research

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Learning objectives

To understand key factors to consider when developing a qualitative study for Health EDRM research, including:

- The epistemological foundations of qualitative research commonly used in disaster research.
- Qualitative research methodologies used in disaster research.
- Methods used in qualitative data collection.
- The power of participatory, performatory and arts-based research in Health EDRM.
- Common issues for qualitative disaster research.

What is qualitative research and data? (1)

Qualitative research is 'the exploration of lived experience and participant-defined meanings.' It looks at the world from a naturalistic and interpretive perspective and uses data that is:

- Collected face-to-face by researcher.
- Done through asking people about their interpretations, understandings, and lived experiences of a particular topic or event.

What is qualitative research and data? (2)

Qualitative research can also use data collected by others, such as pre-existing sources of information, including:

- Websites.
- Publications.
- Media reports.

Depending on the research question, data generated through qualitative research designs may include:

- Participant narratives and field notes from observations.
- Photos, videos and other documents.

What is qualitative research and data? (3)

- Qualitative research can help inform and guide evidence-based practice in public health and Health EDRM.
- Qualitative researchers focus on qualities of the topic being explored.
- Qualitative research is helpful for answering 'what?' or 'how?' research questions.

What is qualitative research and data? (4)

Qualitative research contributes evidence by:

- Exploring people's meanings, perspectives and experiences.
- Studying how things and systems work.
- Understanding context and unanticipated consequences.
- Discovering important patterns and themes across cases.

Strengths of qualitative research

- Reporting results in the voices of participants.
- Placing research in its natural setting to include important contextual factors.
- Smaller sample sizes but with greater depth of findings.
- Flexibility in design for different populations
- Suitable for marginalized populations.
- Starting point when little is known about a topic.
- Allows multiple perspectives.
- Allows study of sensitive topics.
- Inductive and deductive reasoning generates complex understanding.

Differences between qualitative and quantitative research

	Qualitative Research	Quantitative Research
Purpose	Understand and explore behaviour, opinions, experiences from participants' perspectives	Describe social phenomena; Discover facts
Design	Emerging and flexible	Standard and fixed
Paradigm	Multiple interpretations of reality exist (subjective)	Reality is fixed (objective)
Setting	Naturalistic (contextual)	Controlled (empirical)
Sample size	Small	Large
Data Collection	Open-ended Observation, interviews, focus groups, narratives, document analysis, artifacts	Closed-ended Objective measurements Questionnaires and surveys
Data analysis	Inductive Themes, text, images	Deductive Numerical comparisons and statistical inferences
Biases	Acknowledged and assumed to influence findings	Reduced or eliminated
Standards for Quality	Dependability, Credibility and Authenticity, Auditability, Transferability, Confirmability	Internal Validity, External Validity, Reliability, Objectivity

Conduct of qualitative research

- Bias is acknowledged and assumed to influence the interpretation of the findings.
- Important to focus on how rigour is managed in the study.
- Methods for enhancing rigour are built into the study design.
- Ensures interpretations are accurate representations of data generated.
- As many as 60 ways of thinking about qualitative research have been identified.

Assumptions in qualitative research (1)

Post-positivism – based on the assumption that findings cannot be proven beyond doubt, but that confidence is improved through robust measures of reliability and validity. This requires:

- Researchers to be neutral.
- Researchers to reduce bias by attempting to verify and falsify their hypotheses.

Assumptions in qualitative research (2)

Social constructionism – identifies that knowledge is not disinterested or apolitical, and that understandings and meanings are constructed and sustained through social interaction. Therefore, qualitative research:

- Is useful in the study of identity and experience.
- Co-creates research knowledge through collaboration of researcher and participant.

Assumptions in qualitative research (3)

Advocacy/participatory approach – Recognises that lay people have their own knowledge systems and are able to act and solve local problems. Therefore, qualitative research is:

- Community based.
- Empowering and transformative.
- Useful when working with communities or marginalized groups.

Assumptions in qualitative research (4)

Pragmatism – the belief that the meanings of actions and beliefs are found in their consequences. In qualitative research:

- Actions are situational.
- Actions depend on shared sets of beliefs.
- Linked to consequences that are subject to change based on new experiences.
- Choice of research method depends on assumptions made about the research outcomes.
- Research can be done into decision making and in relation to novel events.

Assumptions in qualitative research (5)

Reflexity – understanding the role of self in the creation of knowledge. Therefore, in qualitative research:

- Attention is paid to how the situated knowledge of the researcher impacts on their research.
- It is important to be transparent with the reader about the researcher's worldview.
- There are practical implications for the study design including:
  - Theoretical frameworks
  - Methodologies
  - Methods

'Subjects' versus 'participants'

Participants – people who contribute to research by being interviewed or completing activities to generate data.

- Research is not done 'on subjects' but 'with people'.
- 'Participants' conveys voluntary engagement in research.
- Strong relationships are needed between researchers and participants or community organizations, which can span many years.
- Strong relationships are important in a disaster context given the nature of projects where citizens and communities may be vulnerable.

Narrative research (1)

- Explores people's experiences.
- Ideally leads to an exploration of an individual's life, identity and how they situate themselves in the world.
- Storytelling predominantly uses interviews and documents to collect data, but can also rely on observation, use of pictures and group conversations.
- Several strategies are available for data analysis, including:
  - thematic analysis
  - structural analysis
  - diagnostic/performance analysis

Narrative research (2)

- Restructuring is commonly done by researchers to highlight 'turning points' and important contextual information.
- Researcher often seen as a collaborator and requires much reflexivity,
- Requires the collection of sufficient data to capture a full and clear picture of the context surrounding the story.

Phenomenology (1)

- Purpose is to understand the universal 'essence' of the experience of a phenomenon.
- Goes beyond the individual experience to describe the common meaning for several individuals.
- Unit of analysis is 3 to 25 individuals who have all experienced the same phenomenon (e.g., grief).
- Individual interviews are the most common method of data collection, but documents, observation and art have also been used.
- Researcher's stance is to bracket themselves out of the study in order to focus on experiences of the participants.

Phenomenology (2)

- Textual and structural analysis of data summarizes the phenomenon and how it is experienced.
- Ends with a descriptive report of the universal essence.
- Challenges include:
  - discussing philosophical assumptions of abstract concepts
  - need for careful selection of participants
  - difficulty of researchers bracketing their personal experiences

Grounded Theory (1)

- Purpose is to generate a theory that is grounded in the data to explain a process.
- Uses theoretical sampling to collect data and might include 20 to 60 participants who have all experienced a process.
- One-on-one interview is the most common method of data collection.
- Researcher compares data across interviews with their notes on the researcher's emerging ideas for a theory.

Grounded Theory (2)

- Data analysis strategy depends on the grounded theory approach chosen by the researcher
- Glaserian grounded theory (more structured approach) uses active codes.
- Straussian grounded theory uses open, axial and selective coding.
- Final report includes a diagram and/or hypothesis to accompany the discussion.
- Tends to be reductive.

Ethnography (1)

- Describes the social behaviours of a culture-sharing group.
- Researcher is tasked with describing and interpreting topics such as:
  - Group values
  - Behaviours
  - Beliefs
  - Languages learned
- Unit of analysis is the entire group or a subset of a large culture-sharing group.

Ethnography (2)

- Requires extensive fieldwork using a variety of data collection methods:
  - Observation
  - Interviews
  - Symbols
  - Artifacts
- Researchers are participant observers and become immersed in the day-to-day lives of the group they are researching
- Data analysis begins with an insider perspective on verbatim quotes
- Moves into a scientific perspective to develop overall interpretation of social behaviours within the group.

Case study (1)

- Purpose is to develop an in-depth understanding of a single case or multiple cases.
- Cases must be clearly defined within a bounded system.
- Uses multiple sources of data
- Multiple forms of data collection can include:
  - Interviews
  - Observations
  - Documents
  - Artifacts

Case study (2)

- Data analysis can be explanatory, exploratory and descriptive
- Approaches to case studies differ depending on whether they are intrinsic, instrumental, or collective.
- Can be difficult to identify, bound a case and keep it focused
  - The more cases that are studied, the more the overall analysis will be diluted
  - Recommended to include less than 5 cases in a multiple case design
- Rationale is required to justify choices

Ethnomethodology

- Origins in sociology.
- Focus upon disruption making it very applicable to Health EDRM.
- Explores singular events, including how people interact and make sense of occurrences.
- Considers the context of local language and meaning.
- May be used to look at everyday micro-processes of social interaction.
- Example is the creation of the word 'munted' after 2010-11 earthquakes in Canterbury, New Zealand.

Community-based participatory research (CBPR) (1)

- Many disaster studies focus on communities, making it desirable and necessary to use participatory research designs.
- Focus on creating social change with a community through **collaborative partnerships** and shared **decision-making**.
- When research focuses on post-disaster impacts, unintentional harm within the community must be avoided.
- Guidance from community partners is essential.

Community-based participatory research (CBPR) (2)

Principles of CBPR (Israel et al, 2012)

Principle	Explanation
Acknowledge the community as a unit of identity	Community is not necessarily geographic. One of the defining characteristics of a community is identifying with it. People who identify with a community feel a sense of belonging based on certain attributes.
Research initiatives build on the strengths and resources within the community	This is what is referred to as a strengths-based or asset-based approach. In collaboration with community partners, researchers identify what assets (see Chapter 3.1) or resources are in the community and build on those strengths.
Facilitate collaborative, equitable, empowering partnerships where power is shared and inequalities are addressed through the research	The emphasis on collaborative, equitable partnerships is central to participatory projects. Within these partnerships, power is shared through collaborative decision-making. The research focuses on inequalities and social change to disrupt power differentials.
Co-learning and capacity-building for all partners	CBPR projects emphasize capacity-building within the community and within partnerships. The focus is for people to learn from one another and build capacity within themselves, their organizations and their communities.
Knowledge generation is balanced with intervention activities so everyone benefits	The knowledge that is generated from research processes must be balanced with intervention activities so that it is mutually beneficial for everyone involved and the community.

Community-based participatory research (CBPR) (3)

Principles of CBPR (Israel et al, 2012)

Principle	Explanation
Locally relevant projects which address public health problems and consider ecological perspectives related to determinants of health	Partnerships shape the research agenda by identifying locally relevant issues. CBPR projects can be directed toward understanding and acting on determinants of health which contribute to locally relevant health issues.
Foster systems development using a cyclic, iterative process	By understanding the context of a community and working in partnership with local citizens and organizations, CBPR projects can contribute to systems development or change through an iterative process. As new knowledge is generated, it can be integrated to improve systems within the community.
Sharing the findings and involving community partners in wider dissemination of knowledge	Knowledge which is generated from the project is shared and partners are involved in knowledge mobilization activities for wider dissemination of the findings. This ensures lessons learned from the project are shared with people who can benefit.
Long-term commitment with consideration of sustainability	CBPR projects involve long-term processes starting with partnership development, identification of the issues, designing the project components, securing funding, implementing the research activities, analyzing data, and dissemination of the knowledge generated. Partnerships often continue beyond individual projects in the interest of ensuring sustainability and long term system change.

Case study: *The EnRiCH Research Team Photovoice Project, Canada*

- Grass-roots initiative to engage youth in Health EDRM research and action for social change to promote resilient communities.
- Team meets monthly, with an annual one-week mini-enrichment course.
- Ages range from 13 to 17 years.
- Mentored by undergraduate and graduate university students.
- Youth team members learn about the team's projects and design and work on projects.
- Includes a series of education modules on disaster preparedness.

Case study: *The EnRiCH Research Team Photovoice Project, Canada*

Photovoice uses a qualitative participatory action-based research method to engage and empower community members to reflect and co-create knowledge with researchers. Participants took pictures of their personal experiences and expressed their ideas through picture narrations. They were actively involved in:

- Identifying objects and intended outcomes
- Deciding on Photovoice assignments
- Taking photos about the topic
- Identifying themes
- Planning a 2020 photo exhibition to connect with Youth team invited influential stakeholders in Health EDRM and climate change action.

Case study: *The EnRiCH Research Team Photovoice Project, Canada*

First Photovoice session was held in March 2016, followed by 8 sessions (2 hours each) over a one-year period during which participants:

- Shared photos related to young engagement in Health EDRM
- Discussed issues and solutions for change
- Identified concepts to photograph for for future meetings

Qualitative data were analysed from each Photovoice meeting to bring back preliminary themes for the youth members to confirm or revise.

Key messages

- Qualitative research design and methods has an important role and can fill many research gaps in Health EDRM.
- Rigour is needed to ensure high quality and credible qualitative research contributions.
- Community-based research is based on partnerships and shared ownership of projects.
- The emergent design of qualitative research offers flexibility to address complex and differing experiences.

Further readings

Phillips BD. Qualitative disaster research. In Leavy P, editor. The Oxford handbook of qualitative research. Oxford: Oxford University Press; 2014.
This examines the use of qualitative methods for disaster research. It outlines the general areas where qualitative disaster research is relevant, provides a brief history of qualitative disaster studies and discusses factors that have driven the field forward.

Creswell JW. Qualitative inquiry and research design: Choosing among five approaches (3rd edition). Thousand Oaks, CA: Sage; 2013.
This 11-chapter book explores the philosophical underpinnings, history and key elements of five qualitative inquiry traditions: narrative research, phenomenology, grounded theory, ethnography and case study. The author relates research designs to each of the traditions of inquiry and compares theoretical frameworks, ways to employ standards of quality, and strategies for writing introductions to studies, collecting data, analyzing data, writing a narrative, and verifying results.

Further readings

Saldaña J. The coding manual for qualitative researchers (3rd edition). London: Sage Publications; 2016
This six-chapter manual clarifies the qualitative coding process with a comprehensive assessment of different coding types, examples and exercises. It guides readers through the multiple approaches available for coding qualitative data. A wide array of strategies, from the more straightforward to the more complex, are carefully explained and exemplified by providing a complete toolkit of codes and skills that can be applied to any research project.

Emmel N. Sampling and choosing cases in qualitative research: A realist approach. London: Sage Publications; 2013
This nine-chapter textbook, organized in two parts, critically evaluates widely used sampling strategies, identifying key theoretical assumptions and considering how empirical and theoretical claims are made from these diverse methods.

Further readings

Curtis B, Curtis C. Social research: A practical introduction. London: Sage Publications; 2011.

This 12-chapter theoretically-informed practical guide to researching social relations provides a mixed methods approach that challenges historical divisions between quantitative and qualitative research. It adopts a multidisciplinary approach to social science research, drawing from areas such as sociology, social psychology, and social anthropology. It provides both a procedural account of social research and an understanding of the main factors that contextualize research. Throughout the twelve chapters, procedural accounts and contextual issues are applied to substantive questions and major themes including: (1) research design; (2) the practices of research and emergent researchers (beyond ontology, epistemology and methodology); (3) the impact of technology on research; and (4) putting the research approach in context.

References

This chapter: Pickering CJ, Phibbs S, Kenny C, O'Sullivan T. Chapter 4.12: Qualitative research
Differences between qualitative and quantitative research: Denzin NK, Lincoln YS. The Sage handbook of qualitative research (4th edition). Thousand Oaks: SAGE Publications; 2011.; Creswell JW. 30 Essential skills for the qualitative researcher. Thousand Oaks, CA: SAGE Publications; 2016.
Post-positivism and social Constructionism: Leavy P, editor. Oxford library of psychology. The Oxford Handbook of Qualitative Research. Oxford University Press; 2014.
Advocacy approach: Bowd R, Özerdem A, Kassa D. A theoretical and practical exposition of 'Participatory' Research Methods. In: Özerdem A, Bowd R, editors. Participatory research methodologies: Development and postdisaster/conflict reconstruction. London and New York: Routledge; 2010.

References

Reflexivity: Dodgson J. Reflexivity in qualitative research. Journal of Human Lactation; 2019: 35(2): 220-2.
Five common approaches to qualitative research: Creswell JW. Qualitative inquiry and research design: Choosing among five approaches (3rd edition). Thousand Oaks, CA: SAGE Publications; 2013.
Principles of Community-based participatory research (CBPR): Israel BA, Eng E, Schulz AJ, Parker EA. In: Israel BA, Eng E, Schulz AJ, Parker EA, editors. Introduction to methods for CBPR for health, methods for community-based participatory research for health, 2nd Edition, San Francisco: Jossey-Bass; 2012: pp.3-38.
The EnRiCH Youth Research Team Photovoice Project case study: Wang C, Burris MA. Empowerment through photo novella: Portraits of participation. Health Education & Behavior 1994: 21: 171–86.

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