

RESEARCH METHODS FOR CLINICAL INVESTIGATORS

Session 4:

Qualitative Methods in Health and Healthcare Research

J. Carolyn Graff, PhD, RN

Outcomes

- Describe commonly used qualitative research methods in health and healthcare research
- Compare and contrast quantitative and qualitative research
- Summarize the relevance of qualitative methods
- Consider a health or healthcare issue that can be examined using qualitative research

Qualitative research

- Roots in social science and humanities disciplines
 - Anthropology, social anthropology, sociology, history
 - Distinct methodological and theoretical traditions
 - Common focus on what and why people do what they do in the context of social relationships
 - Health policy and practice challenges increasingly rooted in 'social' contexts
 - Turn to socially-based inquiry to understand

Qualitative health researchers

- Generate knowledge about health and illness ranging from individual perceptions to global systems
- Seek to **understand** a phenomenon instead of **measuring** it
- Phenomena such as attitudes, behaviors, concepts, organizations, technologies, networks, policies

What is qualitative research?

- Qualitative data usually word in contrast to numbers
- Some methods are mostly associated with qualitative research – interviews and participant observation
- Some designs are mostly associated with qualitative research – ethnography, phenomenology
- Other methods and designs are mostly associated with quantitative research – surveys or experiments

Qualitative research questions

- Qual studies seek to understand phenomena, not quantify the phenomena
- Questions tend to be 'what,' 'how,' or 'why' instead of 'how many' or 'how much'
- The aim of many qual studies is to understand, explore, or investigate

Qualitative research and EBP/EBM

- Evidence-based practice seeks to establish scientific research as a fundamental ground for medical decision making
- Questions in the evidence-based approach are about treatment effectiveness
- Hierarchy of evidence = synthesis of RCTs highest, followed by single RCTs, case studies and descriptive studies last

Qualitative research and EBP/EBM

- Critiques of EBM focus on
 - Gender bias
 - Prioritizing medical goals over social goals
 - Fostering behavioral instead of social approaches to health
- Qual research usually does not address clinical effectiveness
- Qual researchers seek to understand “what is going on”

Orientations of qualitative research

- Naturalism
- Reflexivity
- Focus on meaning
- Flexible research strategies

Naturalism

- Study phenomena in their 'natural' or everyday environments
- Ethnographic methods – naturalistic as the researcher becomes part of the setting to provide a 'thick description'
- Produce detailed, empathetic accounts of social worlds, such as those of a hospital clinic, and the theoretical analysis of these accounts

Reflexivity – first level

- Reflect critically on the research itself
 - Why is it possible to ask the research question?
 - Why questions are legitimate?
 - Why they can attract funding?
 - What is the interest in the findings?

Reflexivity – second level

- Personal
 - Consider the researcher's role in generating and analyzing data
 - Who are you? (gender, social status)
 - Where are you? (institution, relative to participant)
- Account for the fact that data are 'produced' rather than merely 'collected'
- Differs from bias or assumption that there is one true account if we could collect it
- Assumes all accounts are inevitably shaped by characteristics

Focus on meaning

- Do not ask what people get wrong or don't know or behave irrationally
- Instead, ask what they do know, how they maintain their health, and what the underlying rationale of their behavior is
- Seek to understand the practices, behaviors, and attitudes of participants, from their perspectives, not from the perspectives of the researcher

Focus on meaning

- Do not ask,
 - “Why don’t doctors implement evidence-based practice?”
- Ask,
 - “How do doctors use evidence?”
 - “What kind of evidence is used in their work?”
 - “How are guidelines, in general, integrated into the day-to-day work doctors have to accomplish?”

Focus on meaning

- Way participants understand what is going on may conflict or be partial
- Meanings and understandings change over time
- Longer engagement with participants allows researchers to observe social life processes unfold
- Recognizing the contextual nature of knowledge and behavior and emphasis on understanding meaning implies acceptance of differing world views.

Flexible research strategies

- Having a flexible research strategy allows for adapting as early data are produced and analyzed
- Dividing the research process into stages (literature review, research design, data collection, analysis, and writing up)
- Stages likely overlap and inform each other *iteratively*

Flexible research strategies

- Qualitative researcher as a ‘bricoleur’
 - Use, adapt, and devise methods of inquiry and draw on bodies of literature as the need arises
 - Appealing in health research as many aspects of everyday life impinge on topics of interest, and shifts are needed as new opportunities arise
 - May be challenging in funded research when sponsors require protocols at the outset of a study

A critical perspective

- Considering a single participant's account of the clinic organization as a valid account is not the same as treating this as the truth about the clinic organization
- Researcher does not simply record stories from participants without critical reflection
- Researcher analyzes data from participants and links findings with a theoretical understanding of the clinic organization

Roles qualitative methodologies play in health research

- Exploratory or pilot work
- Add depth or understanding to findings from quantitative data
- Parallel studies or mixed methods research (qualitative and quantitative)

Exploratory or pilot work

- Development phases – preparation for future work
- Provide data on the feasibility of future work
- Generate hypotheses
- Developmental groundwork for new or adapted surveys or questionnaires

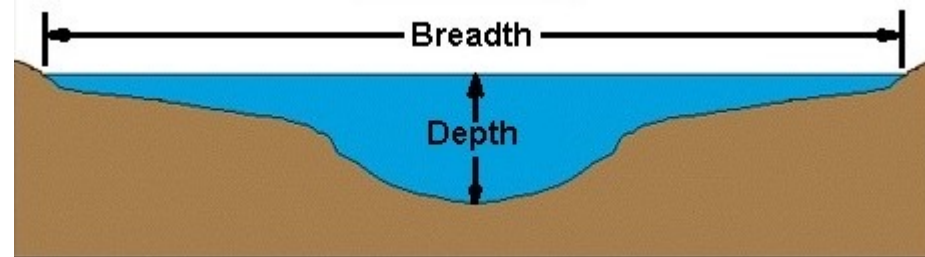
Add depth or understanding to findings from quantitative data

- Logically follows a quan study to understand the relationship between variables, i.e., uncover mechanisms
- Understand the meaning of quantitative records through uncovering processes by which statistics are produced



Add depth or understanding to findings from quantitative data

- Identify social, organizational, and historical factors that shape how these are produced and used – leading to insights into possible threats to reliability and validity



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Mixed methods studies

- Quan and qual research questions may be examined simultaneously in mixed methods studies to extend our understanding of a phenomenon
- Mixed methods research may be needed to
 - Generate different kinds of data (e.g., qual component to address process in an RCT)
 - Address gaps where one method cannot provide data

Assumptions and tensions about qual research

- Qualitative research is not 'scientific'
- Qualitative research can only produce subjective accounts
- Qualitative research does not contribute to the evidence base for health practice and policy

Qual research is not 'scientific'

- Myth 1: Qual methods more inductive than quan methods
 - All research uses inductive and deductive logic
- Myth 2: We can analyze data with a blank slate
 - Theories and assumptions always shape the ways we read data
- Myth 3: Theories and hypotheses come already formed
 - Researchers select the theories to test and have 'hunches' about how to test them

Qual research is not scientific

- Researchers can and should be
 - Disciplined and rigorous in the collection and analysis of data
 - Thorough in subjecting our assumptions to the same critical scrutiny as those of others
 - Approach research with a genuine striving for critical distance
- This critical scrutiny is ethical and pragmatic
- Overtly partisan researchers undermine the base of their claim to produce credible, rigorous accounts

Qual research can only produce subjective accounts

- Qual researchers report subjective experiences, analyze them, and produce reports that have value beyond anecdotes or examples
- Strategies to differentiate research from other activities that describe social life
 - Attention to evidence
 - Critical approach to subjective accounts
 - Critical approach to analytic accounts
 - Careful and rigorous analysis

Qual researchers can only produce subjective accounts

- These strategies help to ensure that accounts or findings generated by qual evidence are supported by the analysis of the data
- Qual researchers would not produce the same account for a given research question and data set
- Qual researchers should endeavor to produce findings that are defensible and cannot be discounted by disconfirming findings

Qual research does not contribute to evidence base for health practice and policy

- Qual methods
 - ‘reach the parts other methods can’t reach’
 - Answer important questions that cannot be answered from a quan perspective
- Qual designs and methodologies
 - Are most substantial for answering questions that are about understanding what people do
 - Generate better data on beliefs and behaviors

Qual research does not contribute to evidence base for health practice and policy

- Qual findings often useful for sensitizing professionals to patients' views
 - Professionals might seek to understand what patients hope to achieve with treatment instead of focusing on treatment risks
- Qual studies have the potential to provide evidence for
 - Population needs
 - Developing appropriate policy
 - Evidence for implementing policy with health care staff

Data collection

- Interviews
 - One-on-one interview
 - Focus group interview, in-person, virtually (web-based or email)
- Observation
 - Conduct as a participant or as an observer
 - Conduct by shifting position from participant to observer or from observer to participant

Data collection

- Documents
 - Research journal, journal, or diary
 - Personal documents (letters, emails, private blogs)
 - Organizational documents (reports, strategic plans, charts, medical records)
 - Public documents (official memos, blogs, records, archival information)
 - Autobiographies and biographies

Audiovisual materials

- Participants take photographs or video recordings
- Photographs or video recordings by others
- Video or film a social situation or individual
- Website, tweets, Facebook messages
- Audio recordings (child's language and speech)
- Phone or computer-based messages
- Possessions or ritual objects

Qualitative approaches to inquiry

- Case study research
- Ethnographic research
- Grounded theory research
- Narrative research
- Phenomenological research
- Qualitative descriptive research

Qualitative research studies

- Understanding why cancer patients may not want information at particular times can help inform a national cancer information strategy based on understanding patients' needs rather than common-sense assumptions about patients' needs (Leydon et al., 2000)

Qualitative research studies

- The study of parents' views about the MMR vaccine found that parents felt more information from health professionals, shared in an open manner, would have helped their decisions, and concluded 'only by fully appreciating the concerns of parents will health professionals be able to . . . restore their confidence in the MMR' (Evans et al., 2001, p. 909).

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