The Use of Qualitative Methods in Practice-Based Research

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Introduction

• Get over the idea that knowledge only means numbers.
What are Qualitative Methods?

- An umbrella term covering an array of interpretive techniques to explore the **meaning** – not the frequency – of beliefs, attitudes and perceptions of people’s lived experiences that shape their interactions.
Why Would I Use Qualitative Methods?

1. To gain important insights into patients’ changing experiences over the course of an illness.
2. To enable an understanding of the relationship dynamics between patients, their families and adherence to recommended treatment or intervention.
3. To explore similarities and differences in behavioral risk factors and inequalities in health care access and outcomes.
4. To facilitate the development of future relationships between patient and physician as a result of increased understanding and discussion of sensitive issues (e.g. adverse childhood events).
5. To improve the quality and scientific power of patient data by contextualizing information to examine situational trends.
We asked for objective data, all I see here are words and pictures.
Creating Good Patient Interview Questions

• Open-ended so that no one can answer with a “yes” or “no”
• *How, what, why, when, and who* questions are best
• Use “think back” questions
• Neutral so that the question does not influence the answer
# Individual Versus Focus Group Interviews

<table>
<thead>
<tr>
<th>Objective</th>
<th>Individual</th>
<th>Focus Group</th>
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</thead>
<tbody>
<tr>
<td>Discovery and exploration of scope of concepts</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Explore consensus of opinions or lack of consensus</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Explore sensitive, personal, or stigmatized concepts</td>
<td>++</td>
<td>+</td>
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<tr>
<td>Avoid potential for interpersonal bias</td>
<td>++</td>
<td>+</td>
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<tr>
<td>Gain in-depth individual understanding</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Concentrate evaluation time and effort</td>
<td>+</td>
<td>++</td>
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Common Stages of Qualitative Analysis

• **Transcription** of tape recorded material
• **Familiarization** with the data through review, reading, listening, etc
• **Organization** or indexing of data for easy retrieval and identification
• **Anonymising** of sensitive data
• **Coding**
  • Identification of concepts
    • Words or phrases
    • Context
    • Internal consistency
    • Similarity of comments
    • Causation
    • Trends/themes
• **1st & 2nd cycle coding** (e.g. different styles)
Common Stages of Qualitative Analysis

- **Coding** (continued)
  - Development of provisional categories
  - Exploration of relationships and patterns between categories
  - Refinement of categories into themes
- **Development of theory** incorporating pre-existing knowledge
- **Testing of theory** against the data (e.g., mixed methods)
- **Report writing** including excerpts from original data if appropriate (e.g., quotes from interviews)
We're just starting to plan our evaluation. Which methods should we consider?

All of them.
Mixed Methods

• A style of research that uses procedures for conducting research that are typically applied in both quantitative and qualitative studies

• The purpose of these designs is to build upon the synergy and strength that exists between quantitative and qualitative methods in order to more fully understand a given phenomenon than is possible using either quantitative or qualitative methods alone
Rationale for MM: 3 Main Reasons

• To produce sequential contributions: use **results from one method to contribute to the needs of another**

• To produce convergent **findings across different methods that each address the same research question** (triangulation, cross-validation): goal is similar results from methods with different strengths

• To produce additional coverage: **match strengths of each method to specific purpose and use each method to study separate part of overall question**

• * “The research design that you choose must link your purposes to your procedures.”*
Mixed Method Designs

- **Explanatory Sequential**
  - Phased
  - Begins with quantitative

- **Exploratory Sequential**
  - Phased
  - Begins with qualitative

- **Convergent Parallel**
  - Concurrent
  - Quantitative and qualitative strands are equal

- **Embedded Design**
  - Often concurrent
  - Qualitative or quantitative is privileged
Situations in Which MM is Helpful

1. You have an intervention that was developed in a specific population and setting. You are not certain that it will work with your patient population … mixed methods is a way to explore first to **determine if an intervention will work**. [Exploratory Sequential]

2. You want to assess the practice of health care delivery. This calls for designing some instruments to measure those outcomes, and then explaining why the outcomes occurred… mixed methods is an approach to **converge data together in an evaluation process**. [Concurrent Parallel]

3. You have gathered data about factors that predict a concept on several instruments. Although you have general information about the importance of predictors, you can only guess as to what explains why the results occurred… mixed methods helps to **explain results** (or how mechanisms work) in causal models. [Explanatory]
Sequential Designs

Explanatory Design

QUAN Data & Results → Qual Data & Results → Interpretation

Following up

Exploratory Design

QUAL Data & Results → Quan Data & Results → Interpretation

Building to

Sequential Embedded Design

Before - intervention Qual → QUAN Intervention Trial → After - intervention Qual → Interpretation
Concurrent/Convergent Parallel Designs

Embedded Design

QUAN Data & Results

Interpretation

QUAL Data & Results

QUAN Pre-test Data & Results

Intervention

Qual “Process”

QUAN Post-test Data & Results

Interpretation

UC San Diego Health System
Take Home Points for the Day

• Mixed methods studies aren’t always the right option
  • Your questions/aims must necessitate 1+ method
• Mixed methods studies aren’t for the faint of heart
• Mixed methods studies are ALWAYS a team effort
• To be able to integrate and communicate your results, you need to think about integration and communication from the beginning
  • Models can help you and your team conceptualize, design, execute, and communicate (and they are usually necessary for funding)
References