

# Qualitative Methods in Health Research

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DMR CASE STUDY Transferability TRUSTWORTHY ISSUES THEME DEPENDABILITY Observation opinion Theme  
DMR KEY INFORMANT INTERVIEW INTEREST FRAMEWORK ANALYSIS context  
DMR Reflexibility NOTE TAKING Credibility OUTLINE TRIANGULATION TRANSFERABILITY context ISSUES context  
Theme NOTE TAKING Grounded Theory TRIANGULATION OPINION Outline Issues context  
Key Informant Interview Research CREDIBILITY Observation ETHICAL Content Analysis THEME Dependability  
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# Sampling & Sample Size In Qualitative Research

Qualitative Methods in Health Research  
**DMR**



**DR MYITZU TIN OUNG**

**MBBS; MA; MPH; PhD (DEMOGRAPHY)**

**DEPUTY DIRECTOR**

**MEDICAL STATISTICS DIVISION**

**DEPARTMENT OF MEDICAL RESEARCH (PYIN OO LWIN BRANCH)**

- What is sampling?
- Why is sampling?
- Types of sampling
- Basis for choice of sampling method
- Approaches to selecting samples
- Sampling methods in qualitative research

- Determination of sample size in qualitative research
- Recruitment of samples

**OUTLINE**





- The process of selecting a number of study units from a defined study population

# What is sampling?

- More manageable
- Less cost
- Less field time
- Less resources

# Why is sampling?

**Probability sampling**

**Non-probability sampling**

**Types of sampling**

## Probability Sampling

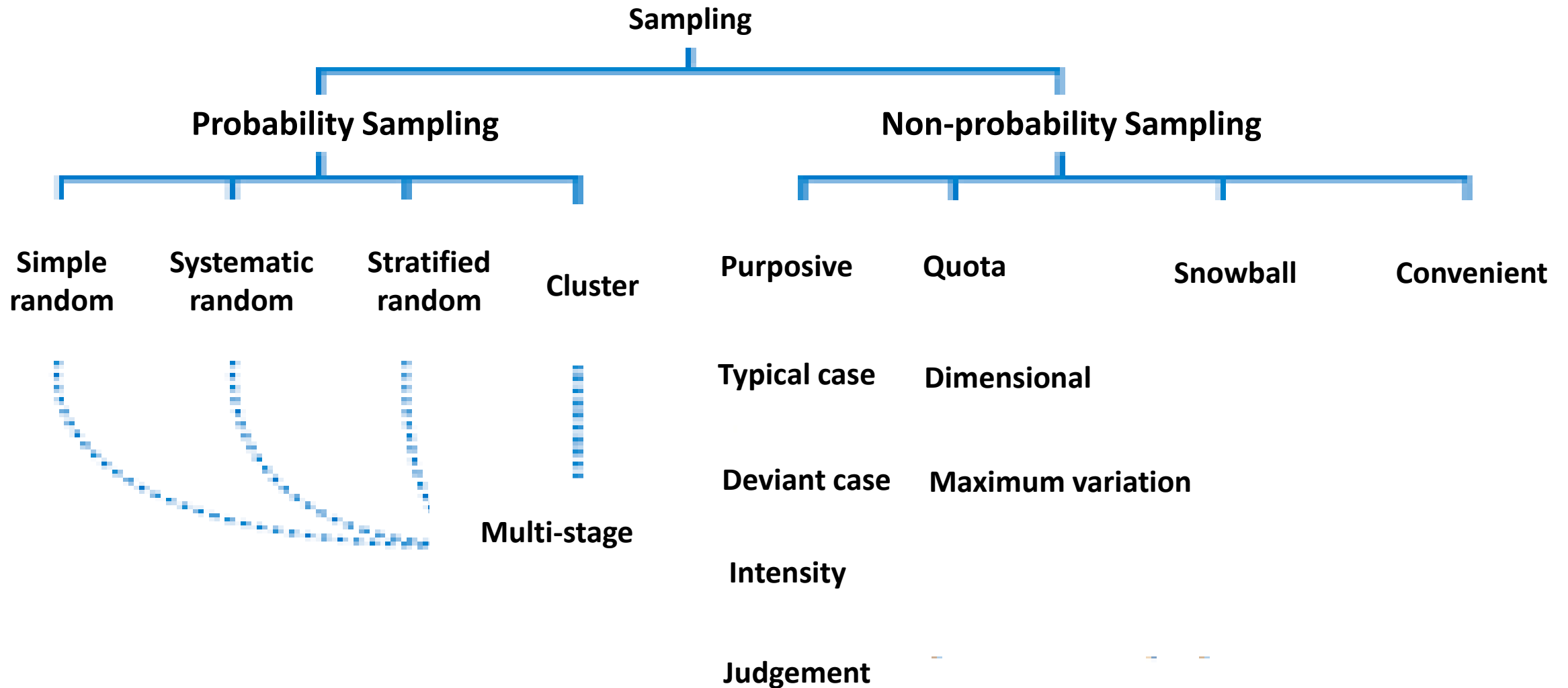
All units of the study population should have an equal, or at least a known chance of being included in the sample

## Non-probability Sampling

Probability of being chosen is unknown or zero

# Types of sampling

# Sampling method





- Research problem
- Objectives
- Accessibility/feasibility

**Basis for choice of  
sampling method**

- Emphasizes **depth more than breadth**, insight rather than generalization
- Purpose is to **produce information-rich data** from a sample chosen

## Approaches to selecting samples in qualitative research

- Not haphazard, but not bound by rigid rules of reproducibility
- Systematic but flexible, **guided by clear research questions**

## Approaches to selecting samples in qualitative research

- Two basic approaches
  - ❖ Theoretical sampling
  - ❖ Priori sampling

## Approaches to selecting samples in qualitative research

# Theoretical sampling

- Appropriate when the main purpose of data collection is **to generate substantive theory**
- Started with small number of individuals and groups
- **Continuous and gradual process**, guided by data collection, analysis, and interpretation as theory builds

# Priori sampling

- Most familiar to applied researchers in public health
- **Defines sampling strategies in advance**
- **Does not preclude sampling additions and changes as the study progresses**



- Typical case sampling
- Extreme or deviant case sampling
- Intensity sampling
- Judgement sampling
- Quota sampling
- Dimensional sampling
- Maximum variation sampling
- Snowball Sampling
- Convenience sampling

## Sampling methods in qualitative research

# Typical Case Sampling

- Normal or average for a particular phenomenon

# Extreme or deviant case sampling

- Unusual examples of the phenomenon we are studying

# Intensity sampling

- Samples with rich in information

# Judgement sampling

- The most 'productive' sample to answer the research question(s)

# Quota sampling

- Identifies the various strata of a population
- Ensures that all these strata are proportionately represented within the sample
- E.g. age (young, old)



# Dimensional sampling

- It is an extension to quota sampling.
- The researcher takes into account all characteristics that **are important to understand the research question,**
- E.g. gender, age, income, residence and education

# Maximum variation sampling

- A wide range of variation on dimensions of interest
- Covers the main groups of research interest

# Snowball sampling

- Locating informants by asking others to identify individuals or group with special understanding of a phenomenon
- Useful to recruit
  - ❖ Secluded women,
  - ❖ People whose behaviour or lifestyle deviates from social norms, or
  - ❖ Anyone fearful of public exposure

# Convenience sampling

- The least rigorous of sampling strategies
- Selection based on who is most accessible (most convenient).
- Useful to try out a data collection method to see if it works (piloting)

- Data saturation or redundancy
- Represent the variation within target population (based on dimensions of interest)

## Determination of sample size in qualitative research



# Data saturation or redundancy

- Large enough to leave you with “nothing left to learn”
- Little or no new information is coming from observations, interviews or focus group discussions



# Represent the variation within target population

- Large in order to assess an appropriate amount of diversity or variation that is represented in the population of interest

# Represent the variation within target population

- Interested in the experiences of women for IYCF practice
- Decided the key demographic variables (dimensions) were:
  1. Age,
  2. Education
  3. Number of children
  4. Economic status

# Represent the variation within target population

Age, Education/  Number of children, Economic situation	<20,  More Educated	<20,  Less educated	>20,  More Educated	>20,  Less educated
1 & 2, better off				
1 & 2, poor				
≥ 3, better off				
≥ 3, poor				

# Represent the variation within target population

- Interested in the issue of barriers to institutional delivery
- Decided the key demographic variables (dimensions) were:
  1. Residence
  2. Education
  3. Economic situation
- At least 2 FGDs for each dimension

# Represent the variation within target population

Urban	Educated	Better off family	2
		Poor family	2
	Less educated	Better off family	2
		Poor family	2
Rural	Educated	Better off family	2
		Poor family	2
	Less educated	Better off family	2
		Poor family	2

## *Minimum Sample Size Recommendations for Most Common Quantitative and Qualitative Research Designs*

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Research Design/Method	Minimum Sample Size Suggestion
Phenomenological	$\leq 10$ interviews (Creswell, 1998); $\geq 6$ (Morse, 1994)
Grounded Theory	15-20 (Creswell, 2002); 20-30 (Creswell, 2007)
Ethnography	1 cultural group (Creswell, 2002); 30-50 interviews (Morse, 1994)
Case Study	3-5 participants (Creswell, 2002)

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## *Minimum Sample Size Recommendations for Most Common Quantitative and Qualitative Research Designs*

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### *Research Design/Method*

### *Minimum Sample Size Suggestion*

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#### *Data Collection Procedure*

Interview

12 participants (Guest, Bunce, & Johnson, 2006)

Focus Group

6-9 participants (Krueger, 2000); 6-10 participants (Langford, Schoenfeld, & Izzo, 2002; Morgan, 1997); 6-12 participants (Johnson & Christensen, 2004); 6-12 participants (Bernard, 1995); 8-12 participants (Baumgartner, Strong, & Hensley, 2002)

3 to 6 focus groups (Krueger, 1994; Morgan, 1997; Onwuegbuzie, Dickinson, Leech, & Zoran, 2007)

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- Project-specific
- Determined by
  - ❖ Type and number of data collection activities
  - ❖ Characteristics of the study population

## Recruitment of samples

- Should be planned in advance
  - ❖ specify criteria for screening potential participants,
  - ❖ the number of people to be recruited,
  - ❖ the location, and
  - ❖ the approach to be used

## Recruitment of samples

- Work together among the investigator and the research team
- Close consultation with community leaders and gatekeepers
- Be respectful of and responsive to the guidance and advice of local experts and community leaders

## Recruitment of samples

# References

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