

School of Nursing Sciences
University of Nairobi
Qualitative Research Seminar_PhD Students

WEEK 2: Data Collection Techniques

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Qualitative Data Collection

- ▶ Interviews
 - unstructured
 - semi-structured
- ▶ Focus Groups
- ▶ Observation
 - Direct
 - Participant
- ▶ Documentation review
- ▶ Reflexive Journal

Improving reliability & Validity

Validity, in qualitative research, relates to whether the findings of your study are true and certain. "True" in the sense of your findings accurately reflecting the real situation. "Certain" in the sense of your findings being backed by evidence.

- Triangulation
- Saturation



Triangulations in Research

Mixed
methods



Triangulation

Triangulation in research is the use of more than one approach to researching a question. The objective is to increase confidence in the findings through the confirmation of a proposition using two or more independent measures. The combination of findings from two or more rigorous approaches provides a more comprehensive picture of the results than either approach could do alone.

Four types of triangulation:

- (a) method triangulation (Qual/Quant)
- (b) investigator triangulation
- (c) theory triangulation, and
- (d) data source triangulation (IDIs/FGD/Observation)

A single method can never adequately shed light on a phenomenon.

- Using multiple (mixed methods) can help facilitate deeper understanding.

Data Saturation

- ▶ It is commonly taken to indicate that, on the basis of the data that have been collected or analyzed hitherto, further data collection and/or analysis are unnecessary.
- ▶ Saturation means that a researcher can be reasonably assured that further data collection would yield similar results and serve to confirm emerging themes and conclusions.
- ▶ When researchers can claim that they have collected enough data to achieve their research purpose, they should report how, when, and to what degree they achieved data saturation

In-depth Interviews

- ❖ In-depth interviews are a technique that elicits a clear picture of the participant's perspectives on the research topic.
 - ❖ During in-depth interviews, the person being interviewed is the expert and the interviewer (research assistant) is the student.
 - ❖ This method allows the participant to share everything they know about the topic.
 - ❖ Interviews are also appropriate for **addressing sensitive** topics that people might be reluctant to discuss in a group setting.
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To be an effective interviewer

Be familiar with research documents:

❖ Informed consent

- ❖ Although you will read the contents of informed consent, you should be able to read them in your own words.

❖ Interview guides

- ❖ In the interview guide, understand the purpose of each question. Sometimes you may need to rephrase the questions for the participants if not clear. You should also be able to spontaneously think of **follow up** questions or **probes**.

To be an effective interviewer

- ❖ Practice interviewing

 - ❖ role-playing

 - ❖ pilot interviews

Important Skills for Interviewing

- ❖ Rapport building
- ❖ Emphasize the participants perspective
- ❖ Adapting to different personalities and emotional states

Techniques for effective questioning

- ❖ Keep track of which question have/have not been asked and answered
 - ❖ One question at a time
 - ❖ Encourage participants to provide elaborate, detailed (not brief) responses
 - ❖ Ask questions that elicit participants own views and experiences (pose in a neutral manner)
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Techniques for effective questioning

- ❖ Ask open ended questions
- ❖ Avoid **leading questions**
- ❖ Use follow up questions:
 - ❖ these are intended to ensure that participants provide the complete set of information that the [MAIN] question was designed to elicit.
- ❖ **Use of Probes**

Leading Questions

- ❖ What are they?
 - ❖ Questions that suggest or give clues towards a particular answer
- ❖ Why they happen
 - ❖ Happens when people have an agenda and are trying to get certain answers
- ❖ Results
 - ❖ Data may reflect the interviewer's opinion, not the participant's views

How NOT to ask leading questions

- ❖ Let the informant direct the conversation
 - ❖ DON'T GIVE EXAMPLES!
 - ❖ Use open-ended questions
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Leading vs. non-Leading Questions

Leading:

“Most people in this community use condoms, don’t they?”

Non-Leading:

“What do you think stops people in the community from using condoms?”

Leading:

❖ “Were you using the female condom because you wanted to prevent STIs?”

Non-leading:

❖ “Why did you want to use the female condom?”

How open-ended questions help

- ❖ Form the basis of qualitative methods
 - ❖ Allow unexpected information to emerge
 - ❖ Allow participants to tell you stories about how they think, feel, and behave
 - ❖ Does not include multiple choice types of responses
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Examples: Open vs. Closed

❖ Do you have a good relationship with your mother-in-law?

❖ Tell me about your relationship with your mother-in-law?

❖ Did you have a good day?

❖ How was your day?

Avoid Leading Re-actions

Reactions to information from informants

- ❖ Expressions of approval or disapproval (facial and body language)
- ❖ What is ok?
 - ❖ Express interest
 - ❖ Express socially appropriate responses when sure they are appropriate.

Probing

- ❖ Non-leading way to get more information
 - ❖ Silent
 - ❖ 'Uh-huh'
 - ❖ Echo
 - ❖ 'Tell me more about...' / 'tell me a story about'
- ❖ Probes get people back on topic when they stray off.

Examples of Probing

- ❖ What did you mean when you said...?
 - ❖ How did this happen...?
 - ❖ Can you give me an example of X....?
 - ❖ How did you feel about Y...?
 - ❖ I am not sure I understand X.... Can you explain...?
 - ❖ Interesting... uh huh...
 - ❖ Using silence to probe
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Use participant's vocabulary

- ❖ Avoid introducing new words
 - ❖ Wait until the participant talks about the topic, then use their terms
 - ❖ Don't assume what they are saying!
 - ❖ Don't be afraid to ask for clarification
 - ❖ It's best to report exactly what was said
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Additional Tips

- ❖ Be very observant of their gestures
 - ❖ Use appropriate language for each particular group
 - ❖ Dress simple and relaxed, avoid a serious look
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In-depth interviews: other issues to consider

- ❖ Duration of interview
- ❖ If the interview is interrupted
 - ❖ Be patient.

Issues to Consider

- ❖ If participant does not complete the interview:
 - ❖ Use data up to that point
 - ❖ Participant does not know about the topic
 - ❖ Documenting
 - ❖ Handling field notes
 - ❖ When to share data with research team
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Interview Check List

Make arrangements for

- ❖ Private setting for interview site
 - ❖ Transportation of staff to interview site
 - ❖ Transportation of participant to interview site
 - ❖ Refreshments for participants (if applicable)
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What to take to the interview—examples

- ❖ Tape recorder
- ❖ Spare batteries
- ❖ Field notebook and pens

Equipment

- ❖ 1 large, heavy-duty envelope; information sheet with a number
- ❖ 1 copy of interview guide (in the appropriate language for participant)
- ❖ informed consent forms (1 for interviewer, 1 for participant, in the appropriate language)
- ❖ Participant reimbursement (if applicable)
- ❖ Reimbursement form (if applicable)

Interviewing Packet

What to place in the envelope after the interview

- ❖ Completed information sheet
- ❖ Signed informed consent form
 - ❖ (by interviewer and participant (if applicable))
- ❖ Labeled interview guide with notes
- ❖ Field notes
- ❖ Labeled cassette tapes
- ❖ Signed reimbursement form (if applicable)

Key Informant Interviews



What is a Key Informant Interview?

- ❖ In-depth interviews conducted by an interviewer with an individual selected for his/her knowledge about the community
 - ❖ Collects information from people with a particular knowledge of the problem in the community
 - ❖ Discussion with a “community expert”
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When to conduct Key Informant Interviews

- ❖ Gather data from those who know the community well–
"community experts"
 - ❖ To understand motivation and beliefs of community members about a particular topic
 - ❖ To get information from key people with diverse backgrounds and opinions
 - ❖ To discuss sensitive topics in-depth
 - ❖ To get more candid or in-depth answers than would be possible in a group interview
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Steps in conducting Key Informant Interviews

- ❖ Identify key informants
 - ❖ diversity important
- ❖ Select type of interview
 - ❖ structured vs. semi-structured
- ❖ Prepare an interview guide
 - ❖ introduction, questions, probes, summary
- ❖ Conduct interview
- ❖ Record data
 - ❖ both handwritten and recorded
- ❖ Process data
- ❖ Analyze data



Advantages & Disadvantages of Key Informant Interviews

Advantages	Disadvantages
<ul style="list-style-type: none">❖ Detailed and rich data can be gathered in a relatively easy and inexpensive way❖ Allows interviewer to establish rapport with the respondent and clarify questions❖ Provides an opportunity to build or strengthen relationships with important community informants and stakeholders❖ Can raise awareness, interest, and enthusiasm around an issue❖ Can contact informants to clarify issues as needed	<ul style="list-style-type: none">❖ Selecting the “right” key informants may be difficult so they represent diverse backgrounds and viewpoints❖ May be challenging to reach and schedule interviews with busy and/or hard-to-reach respondents❖ Difficult to generalize results to the larger population unless interviewing many key informants

Source: UCLA Center for Health Policy Research Health DATA Program – Data, Advocacy and Technical Assistance , section 4,
<http://healthpolicy.ucla.edu/ProgramDetails.aspx?id=51>

Sampling in Qualitative Research

- ❖ Convenience Sampling
 - ❖ Purposive Sampling
 - ❖ Snowball Sampling
 - ❖ Respondent Driven Sampling
 - ❖ Quota Sampling
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Purposive

A purposive sample is a non-probability sample that is selected based on characteristics of a population and the objective of the study. Purposive sampling is also known as judgmental, selective, or subjective sampling:

Purposive Sampling Types

- ❖ Maximum Variation/Heterogeneous Purposive Sample
- ❖ Homogeneous Purposive Sample
- ❖ Typical Case Sampling
- ❖ Extreme/Deviant Case Sampling
- ❖ Critical Case Sampling
- ❖ Total Population Sampling
- ❖ Expert Sampling

Convenience Sampling

- ❖ Convenience sampling is a type of nonprobability or
- ❖ nonrandom sampling where members of the target population
- ❖ that meet certain *practical criteria*, such as:
 - ❖ easy accessibility,
 - ❖ geographical proximity,
 - ❖ availability at a given time,
 - ❖ or the willingness to participate are included for the purpose of the
 - ❖ Study.
- ❖ It is researching subjects of the population that are easily accessible to the researcher

Snowball Sampling

- ❖ Snowball sampling is where research participants recruit other participants for a test or study.
 - ❖ It is used where potential participants are hard to find (hidden populations e.g. sex workers, men who have sex with men).
 - ❖ (Respondent driven sampling)
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Quota Sampling

- ❖ In quota sampling, a population is first segmented into mutually exclusive sub-groups, just as in stratified sampling.
- ❖ Then judgment is used to select the subjects or units from each segment based on a specified proportion.
- ❖ Stratified vs. Quota sampling
 - ❖ Stratified sampling requires random sampling for each strata
 - ❖ Quota sampling does not require random sampling for each quota

Reflexive Journal

- ❖ This is a type of diary where a researcher makes regular entries during the research process. In these entries, the researcher records methodological decisions and the reasons for them, the logistics of the study, and reflection upon what is happening in terms of one's own values and interests.

Focus Group Discussions (FGDs)



What is a Focus Group?

- ❖ Group interview
- ❖ Usually around 8–12 people
- ❖ Moderated by group leader
- ❖ Participant interaction encouraged
- ❖ “Focused” on a few main topics
 - ❖ Participants generate additional questions, direction
- ❖ Usually homogenous – members share common characteristics
 - ❖ Age, sex, education level, religion, etc.

When to use Focus Groups?

- ❖ In-depth exploration of cultural norms, feelings, attitudes, opinions
 - ❖ What community thinks about a subject
 - ❖ Why community thinks this way
 - ❖ Understand community interaction
 - ❖ Explore group social processes
 - ❖ Capture forms of communication not present in individual interviews
 - ❖ Jokes, anecdotes, teasing, arguing
 - ❖ Does not require reasoned responses
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Focus Group Methods

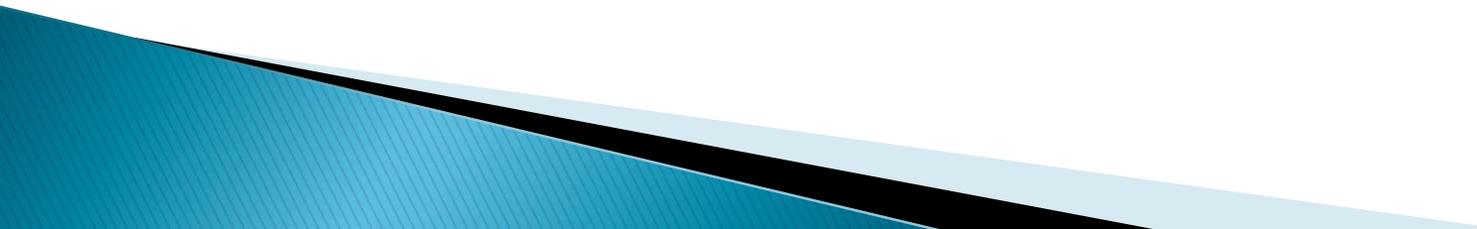
- ❖ **Recruitment**—identifying and enrolling participants
 - ❖ Criteria for inclusion
 - ❖ Location of recruitment
 - ❖ Sensitivity to vulnerable populations
 - ❖ Determined by data collection techniques
 - ❖ Informed consent
- ❖ **Group Composition**
 - ❖ Identify subgroups
 - ❖ Members must have something in common

Steps in Moderating a Focus Group

Preparing for the Focus Group

- ❖ Study the focus group guide
 - ❖ Study the informed consent document
 - ❖ Practice both moderating and taking notes
 - ❖ Decide with the note-taker how you will handle not using participants' real names
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Steps in Moderating a Focus Groups

- ❖ Review debriefing notes from previous focus groups.
 - ❖ Prepare a checklist of everything you need to bring to the focus group
 - ❖ Confirm the reservation of the focus group location and arrange for refreshments (if applicable).
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FGD checklist – What to bring

❖ Equipment:

- ❖ 2 (if possible) audio recorders (1 is a backup)–
- ❖ Some researchers don't like taping FGDS
- ❖ Spare Batteries
- ❖ Field Notebook / Pen (s)
- ❖ Papers for drawing
- ❖ Crayons for drawing
- ❖ Labels for participants: Cards to hang around participant's neck, A, B, C...

❖ FGD Packet:

- ❖ Informed Consent and Assent Forms
- ❖ Pens / Markers for thumbprint
- ❖ Demographic Form
- ❖ 2 Copies of FGD Field Guides

FGD checklist – Setting it up

- ❖ **MAKE ARRANGEMENTS FOR**
 - ❖ Quiet setting for FGD
 - ❖ Chairs arranged in circle
 - ❖ Refreshments for participants
 - ❖ Incentives for participants
 - ❖ Transport both directions

FGD Checklist – COMMENCING AND RUNNING THE FGD

FGD Steps

- ❖ Introductions/set ground rules
- ❖ Explain purpose/informed consent/assent
- ❖ Confidentiality, OK to withdraw
- ❖ Complete demographic form
- ❖ Turn on digital audio recorder (IF applicable)
- ❖ Begin guided discussion based on guide
- ❖ Remember to Smile 😊
- ❖ Switch off recorder when finished
- ❖ Distribute tokens of appreciation (IF applicable)

Focus Group Methods: FG Guides

❖ Introductory script

- ❖ purpose, process, consent
- ❖ Confidentiality, ground rules

❖ Principles of questioning same as what we discussed in the introduction

❖ Start with general issues

❖ Move to more sensitive issues once participants are comfortable interacting

❖ Finish with summary, check themes, prioritization

❖ Iterative process—each discussion informs

❖ Recording Data

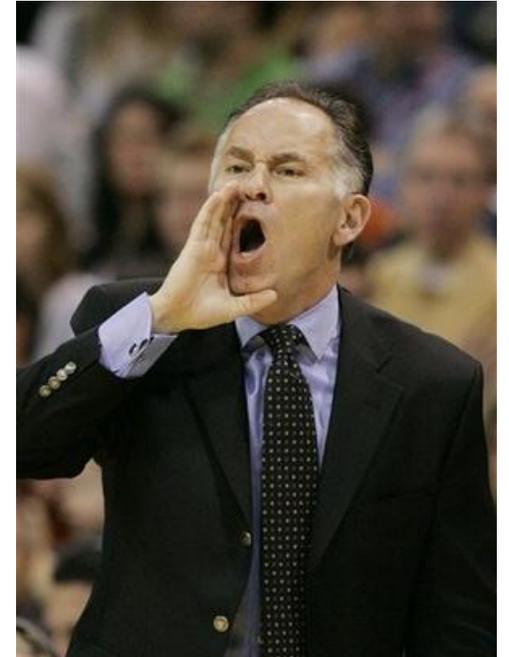
❖ **Note Taker** – take notes on process, seating chart, participant interaction

Focus Group Methods: Moderating

- ❖ **Role of the moderator – facilitator not “expert”**
 - ❖ Facilitate introduction of group members (names or identifiers)
 - ❖ Monitor energy levels & concentration–short breaks if necessary
 - ❖ Show participants that their contributions are valuable
 - ❖ words & body language
 - ❖ May need to facilitate keeping discussion on track
 - ❖ Use phrases & terminology familiar to participants
 - ❖ Manage disagreements and debates with tact
 - ❖ Manage power and privacy issues with sensitivity

Focus Group Methods – Managing Potential Problems

- ❖ **Dominating Participant**
 - ❖ invite each person to speak
- ❖ **Confrontations**
 - ❖ allow group to police itself
 - ❖ “Do others in the group agree?”
- ❖ **Differences of Opinion**
 - ❖ avoid taking sides
- ❖ **Hesitant participants**
 - ❖ ask for additional comments, make eye contact
- ❖ **Angry/Aggressive responses**
 - ❖ reminder of ground rules, focus on idea rather than person to lower tension
- ❖ **Emotional response**
 - ❖ be sensitive to situation

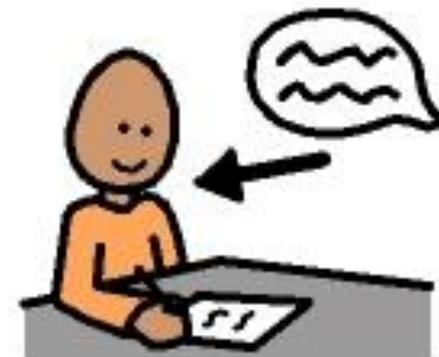


FGD Checklist – After the FGD

- ❖ WHAT TO PLACE IN ENVELOP POST FGD...AFTER TRANSCRIPTION
 - ❖ Completed Demographic Sheet
 - ❖ Signed Informed Consents/Assents
 - ❖ Labeled, expanded Field Notes
 - ❖ Labeled, verbatim transcriptions of FGD
 - ❖ Checklists – signed by note taker, facilitator and data coordinator
 - ❖ Seal Envelop and Sign

Focus Group Methods: After the FGD

- ❖ Debrief immediately following FG–detailed field notes on procedure and process
 - ❖ Transcribe recorded data
 - ❖ Check for accuracy/translation accuracy if necessary
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- ❖ Analyzing Data
 - ❖ Writing up Results



Advantages of Focus Groups

- ❖ Participants not required to read & write
 - ❖ Works well with children
 - ❖ Participants with low literacy levels
- ❖ Allows participants to explore and clarify views with each other
 - ❖ Information not generated by 1-on-1 interview
 - ❖ Act as checks and balances on individual perception and opinion
- ❖ Gather rich data in participant's own words
- ❖ Opportunity for participants to be involved in preliminary analysis
 - ❖ “What is the most important issue we have talked about today?” etc.

Limitations of Focus Groups

- ❖ Participant's response not independent
- ❖ Dominant members can skew session
- ❖ Requires skilled and experienced moderator
- ❖ Data analysis requires skill and experience

