INTRODUCTION TO QUALITATIVE RESEARCH

Lecture Objectives

- **This lecture will help you to:**

1. Recognise the key characteristics of qualitative research.
2. Describe methods of data collection and analysis in a qualitative study.
3. Understand sampling method in qualitative research
4. Recognise the concept of trustworthiness in qualitative research.
5. Understand limitation of qualitative research.

WHAT IS QUALITATIVE RESEARCH?

- Quality refers to the **How and Why of a thing.**

- Qualitative research refers to descriptions of things.

WHAT IS QUALITATIVE RESEARCH? CONT'D

- Qualitative research offers unique opportunities for understanding complex situations.
- Qualitative research seeks to understand the phenomenon under study in the context of the culture or the setting in which it has been studied (naturalistic).
- Adjectives like: **Rich, Deep, Thick** used when talking about qualitative research.

Examples of research objectives for qualitative research

1. to assess medical students’ perception of their quality of life and to explore its modifying factors related to the academic environment and individual skills.
2. to explore current perceptions of healthcare staff towards reporting and organisational learning for improving patient safety.
3. to determine dentistry students' perceptions of risk factors involved in developing musculoskeletal disorders.
4. to investigate perceptions of XXX women of childbearing age and healthcare professionals regarding preconception health.

Qualitative and Quantitative research questions

- **Quantitative Research question**: What proportion of people with epilepsy stop taking medications for three consecutive days in 6-month period?

- **Qualitative Research question:** How does medication shape the lives of people with epilepsy?

Characteristics of Qualitative Research

- The focus is on process, understanding, and meaning;
- The researcher is the primary instrument of data collection and analysis;
- The process is inductive;
- The product is richly descriptive.

Focus on Meaning and Understanding

- Qualitative researchers are interested in how people interpret their experiences, how they construct their worlds, what meaning they attribute to their experiences.

Researcher as Primary Instrument

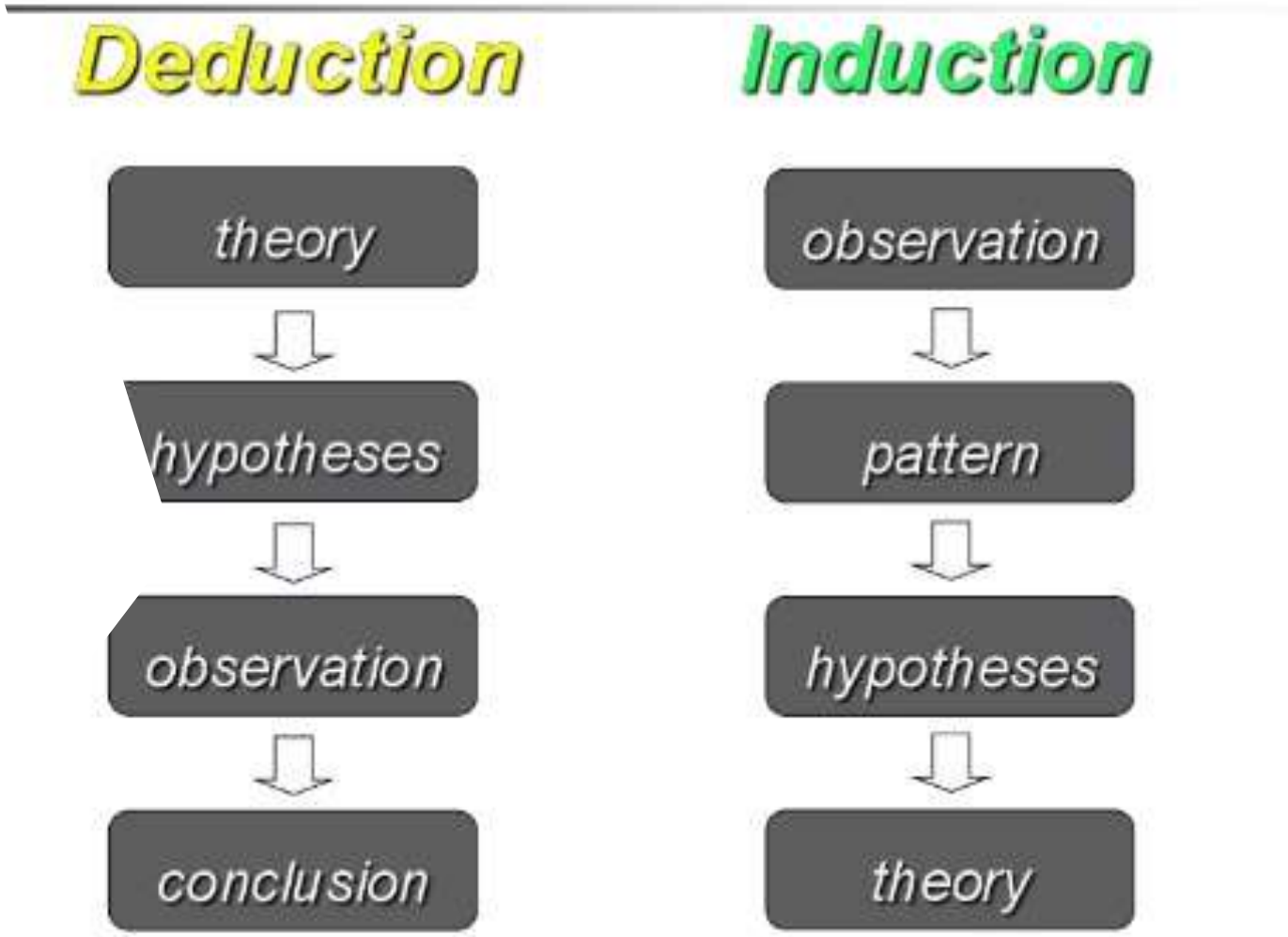
- A second characteristic of all forms of qualitative research is that *the researcher is the primary instrument for data collection and analysis.*

- Since understanding is the goal of this research, the human instrument, which is able to be immediately responsive and adaptive, would seem to be the ideal means of collecting and analysing data.

- Other advantages are that the researcher can expand his or her understanding through nonverbal as well as verbal communication, process information (data) immediately, clarify and summarize material, check with respondents for accuracy of interpretation.

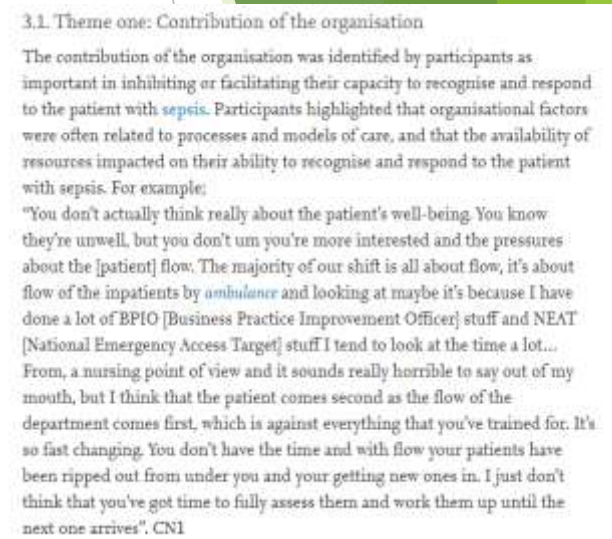
The process is inductive……

- Often qualitative researchers undertake a qualitative study because there is a lack of theory or an existing theory fails to adequately explain a phenomenon.
- Another important characteristic of qualitative research is that the process is inductive; that is, researchers gather data to build concepts, hypotheses, or theories rather than deductively testing hypotheses as in quantitative research.
- Bits and pieces of information from interviews, observations, or documents are combined and ordered into larger themes as the researcher works from the particular to the general.



Rich Description of the end product

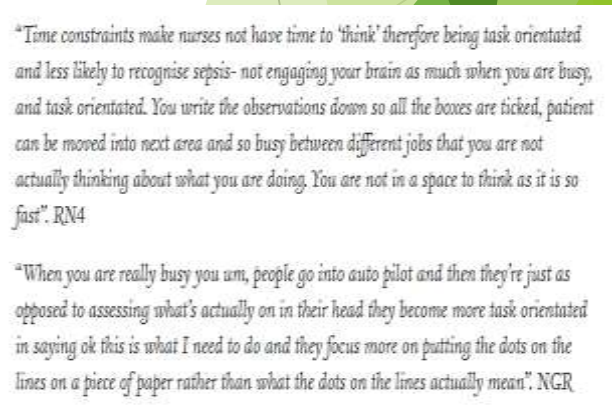
- The product of a qualitative inquiry is *richly descriptive*.
- Words and pictures rather than numbers are used to convey what the researcher has learned about a phenomenon.
- In addition, data in the form of quotes from documents, field notes, and participant interviews, are always included in support of the findings of the study. These quotes contribute to the descriptive nature of qualitative research.



3.1. Theme one: Contribution of the organisation

The contribution of the organisation was identified by participants as important in inhibiting or facilitating their capacity to recognise and respond to the patient with sepsis. Participants highlighted that organisational factors were often related to processes and models of care, and that the availability of resources impacted on their ability to recognise and respond to the patient with sepsis. For example:

"You don't actually think really about the patient's well-being. You know they're unwell, but you don't um you're more interested and the pressures about the [patient] flow. The majority of our shift is all about flow, it's about flow of the inpatients by ambulance and looking at maybe it's because I have done a lot of BPIO [Business Practice Improvement Officer] stuff and NEAT [National Emergency Access Target] stuff I tend to look at the time a lot... From, a nursing point of view and it sounds really horrible to say out of my mouth, but I think that the patient comes second as the flow of the department comes first, which is against everything that you've trained for. It's so fast changing. You don't have the time and with flow your patients have been ripped out from under you and your getting new ones in. I just don't think that you've got time to fully assess them and work them up until the next one arrives". CN1



"Time constraints make nurses not have time to 'think' therefore being task orientated and less likely to recognise sepsis- not engaging your brain as much when you are busy, and task orientated. You write the observations down so all the boxes are ticked, patient can be moved into next area and so busy between different jobs that you are not actually thinking about what you are doing. You are not in a space to think as it is so fast". RN4

"When you are really busy you um, people go into auto pilot and then they're just as opposed to assessing what's actually on in their head they become more task orientated in saying ok this is what I need to do and they focus more on putting the dots on the lines on a piece of paper rather than what the dots on the lines actually mean". NGR

Example of findings in qualitative research- descriptive

Table 2 Factors influencing patient safety, as perceived by the nurses

Category	Description of the category	Barriers (B) and facilitators (F)
Patient factors	Patient factors relate to patients' influence on patient safety as perceived by the nurses	Patient interaction (B + F)
		Patient engagement (F)
Individual staff factors	Individual staff factors refer to various personal characteristics of the nurses and other health care providers that the nurses perceived to influence patient safety	Interest and knowledge (F)
		Skills and abilities (B + F)
		Feelings (B)
		Fallibility (B)
Team factors	Team factors refer to various aspects of the interaction between nurses and other health care providers that the nurses perceived to influence patient safety	Collaboration in multiprofessional teams (B + F)
		Communication with colleagues (B + F)
Task and technology factors	Task and technology factors concern workplace technologies and processes involved in storing and sharing of data, information and knowledge that the nurses perceived to influence patient safety	Collecting, storing and sharing patient safety-related data and information (B + F)
		Medical records (B + F)
		Incident reporting (B + F)
		Computerized technology (B + F)
		Written protocols (F)
Work environment factors	Work environment factors relate to workplace conditions that the nurses perceived to influence patient safety	Structures and forums for learning from errors (B + F)
		Work schedule (B)
		Staffing levels and competence mix (B + F)
		Physical environment (B)
Organizational and management factors	Organizational and management factors concern conditions of the health care organization (beyond the specific workplace in which the nurses work) that the nurses perceived to influence patient safety	Leadership (B + F)
		Financial resources (B)
Institutional context factors	Institutional context factors refer to conditions of the outer context of the health care organization that the nurses perceived to influence patient safety	Use of knowledge from external sources (B + F)
		Communication with people external to the workplace (B)
		Societal interest in patient safety (F)

Example of findings in quantitative research

Table 3

The correlation between dimensions of EBP perceived by nurses

dimensions	Practice		attitude		knowledge	
	coefficient	p	coefficient	p	coefficient	p
practice	1		0.222	0.004	0.734	<0.001
attitude			1		0.443	<0.001
knowledge					1	

p<0.01

PURPOSES OF QUALITATIVE RESEARCH

- Describe
- Understand
- Explain
- Identify
- Develop
- Generate

DATA COLLECTION IN QUALITATIVE RESEARCH

- Observations
- Interviews
- Documents review/analysis

QUALITATIVE DATA COLLECTION METHODS (CONT'D)

- **Observations,** in which the researcher takes field notes on the activities and behaviour of the individuals at the research site. In these field notes, the researcher records in an unstructured or semi-structured way, activities at the research site.

- **Interviews,** the research conducts face to face interviews with participants, interviews participants by telephone or engages in focus group interviews with six to eight interviewees in each group. These interviews involve generally open ended questions that are few in number and intended to elicit views and opinions from participants.

- **Document review/analysis,** the researcher may collect documents, these may be public documents (newspapers, reports)

(Creswell & Poth, 2007)

QUALITATIVE DATA ANALYSIS

- Thematic analysis.
- It is not sharply divided from other activities such as collecting data.

Thematic Analysis

- Peyrovi, H., Nikbakht Nasrabadi, A., & Valiee, S. (2016). Exploration of the barriers of reporting nursing errors in intensive care units: A qualitative study. *Journal of the Intensive Care Society*, *17*(3), 215-221.

Results

In total, 16 registered nurses, 8 female and 8 male, were recruited to the study. Three participants held a master's degree, while 13 participants held a bachelor's degree in nursing. The participants' mean age was 32 years. The minimum and maximum general work experiences were 2 and 23 years, respectively, with a mean of 9.56 years. The participants in this research had between 1 and 12 years of working experience with a mean of 6.98 years at ICUs.

The qualitative analysis led to the emergence of four themes about the barriers to report nursing errors by nurses: (a) saving professional reputation and preventing stigma; (b) fear of consequences – punishment, legal problems and organisational misconduct; (c) feelings of insecurity – pointing a finger at nurses and lack of managerial support and (d) not investigating the root cause of error (Table 1).

Table 1. Summary of categories and subcategories.

Category	Subcategories
Saving one's reputation	Stigma Professional reputation
Fear of consequences	Punishment Legal problems Organisational misconduct
Feelings of insecurity	Pointing a finger at nurses Lack of managerial support
Not investigating the root cause of error	Lack of attention to the cause of the error Failure to follow the origin of error

Saving one's reputation

One of the important barriers to effective error reporting among critical care nurses was saving their reputation among their colleagues, physicians, managers, patients and families. The goal of saving the reputation was based on individual and professional aspects. On a personal level, nurses did not want to be stigmatised by others and they did not want to tarnish their professional reputation in the organisation.

Stigma. Stigma was mostly due to others' reactions. Participants were thinking that in providing an error report, the managers would attribute other problems of the patient to them.

In this regard, one of the participants stated that '*If you report an error and then something happens to the patient, there will be discussion for days that such a nurse makes mistakes. Then, if anything goes right, only the wrong things are thought about by others?*' (Participant 1). Another participant also alluded to the issue: '*...Projection means you see staff around yourself or doctors that relate everything to that error you made...*' (Participant 14). Another participant alluded to stigma by saying that '*...for example, I administer captopril rather than nitrocontin and I*

Qualitative research process

- Select topic and problem- problem identification.
- Justify significance of study
- Design study
- Identify and gain access to subjects
- Select study subjects and data (purposive sampling)
- Analyse data
- Interpret results/conclusion

Qualitative research design

- Qualitative research design is **emergent**.
- The initial plan for research cannot be tightly prescribed, and that all phases of the process may change or shift after the researchers enter the field and begin to collect data.

Quantitative Versus Qualitative (study design)

	Quantitative	Qualitative
Flexibility in study design	Study design is stable from beginning to end	Some aspects of the study are flexible (for example, the addition, exclusion, or wording of particular interview questions)
	Participant responses do not influence or determine how and which questions researchers ask next	Participant responses affect how and which questions researchers ask next
	Study design is subject to statistical assumptions and conditions	Study design is iterative, that is, data collection and research questions are adjusted according to what is learned

QUALITATIVE SAMPLING

- Selection of a sample is a key element of a study design.
- Usually non-probability (purposive) sampling.
- Purposive sampling facilitates the selection of participants whose qualities or experiences are required for the study.

RIGOUR OF QUALITATIVE RESEARCH

- Rigour refers to the quality of the research.

- Strategies that help in achieving rigour in qualitative research.

1. Clear descriptions of the sample necessary for the study to be meaningful.
2. An indication of how and why the sample was chosen.
3. Engagement with others, such as multiple researchers, in order to code or discuss data widely.
4. The use of quotations in the representation of data findings.
5. Triangulation (examining the phenomenon from different angles; measures, methods, researchers).

TRUSTWORTHINESS OF QUALITATIVE RESEARCH

- Trustworthiness refers to the assessment of the quality and worth of the complete study.

- Help to determine how study findings reflect the aims of the study, according to the data provided by respondents.

FEASIBILTY

- The feasibility of research projects must be considered early on in the design phase of a study, in order to determine whether the research is likely to be successfully completed.
- Researchers need to consider staffing requirements for data collection, and analysis, as well as budget constraints, and required time frames.
- For example, asking a group of participants to complete a one hundred-page questionnaire survey or attend a two-day focus group meeting is unlikely to be considered feasible by most people.
- The scope of the project must also be feasible, with refinement of research questions to a focused topic.

LIMITATIONS OF QUALITATIVE RESEARCH

- The main limitation of qualitative research is that their findings cannot be extended to wider populations with the same degree of certainty that quantitative analyses can (limited generalisability).


thank you