



MEDICAL UNIVERSITY – PLEVEN
FACULTY OF PUBLIC HEALTH
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Lecture № 2

**SOCIOLOGY AS APPLIED TO
MEDICINE AND HEALTH CARE
SYSTEM**

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What do medical sociologists study?

- Social causes and patterns of health and disease;
- Social behavior of health care personnel and their patients;
- Social functions of health organizations and institutions;
- Relationship of health care delivery systems to other social systems.

Important field of study because:

- Recognizes the critical role social factors play in determining or influencing the health of individuals, groups, and the larger society.

Sociologists use the following methods

- **Surveys**
- Observations
- Experiments
- Secondary Analysis

SURVEY RESEARCH

- Method in which subjects respond to a series of statements or questions in a self-administered questionnaire or an interview.
 - Surveys are directed at **populations**, the people who are the focus of research.
 - Usually we study a **sample**, a part of a population that represents the whole. **Random sampling** is commonly used to be sure that the sample is actually representative of the entire population.
 - Surveys involve **questionnaires** - a series of written questions a researcher presents to subjects.
- This technique uses statistical methods to analyze data

DESIGNING THE QUESTIONNAIRE

- Determine survey objectives: Plan what to measure.
- Decide on format. e.g. personal interview, telephone, self.
- Formulate questions to obtain the needed information
- Decide on the wording of questions
- Decide on the question sequence and layout of the questionnaire
- Using a sample, test the questionnaire for omissions and ambiguity – **pilot study**
- Correct the problems (pretest again, if necessary)

The Major Decisions in Questionnaire Design

1. **Content** - What should be asked?
2. **Wording** - How should each question be phrased?
3. **Sequence** - In what order should the questions be presented?
4. **Layout** - What layout will best serve the research objectives?

The most difficult step is specifying exactly what information is to be collected from each respondent

Content: Questions must meet 5 requirements

1. Are the questions **relevant**. Do they pertain to the research problem?
2. Are the questions **accurate**. Do they accurately depict the attitudes, behaviors, etc. intended to investigate?
3. Do respondents have the **necessary information**?
4. Do respondents **understand** and interpret the question correctly?
5. Will respondents give the information?

Wording: How should the questions be asked?

Format: How much freedom do we give respondents in answering questions?

1. Open Ended Questions – no predetermined answers
2. Closed questions – options of answer provided

Open Ended Questions: key advantages

- Wide range of responses and information can be obtained
- Answers based on respondent's not researcher's terms
- Lack of influence.
- Particularly useful as introduction to survey or topic
- When too many possible responses to be listed or unknown

Open-ended questions: Key disadvantages

- Interviewer's ability to record answers quickly or summarize accurately
- Interviewer's attitude influences response
- Time consuming
- Difficulty in coding
- Require respondents to be articulate
- Respondents may miss important points
- Risk of non-response

CLOSED QUESTIONS

SCALES FOR MEASURING ATTITUDE

Do you agree that stray dogs carry a higher risk of rabies?

Lickert scale

- No, I strongly disagree
- No, I disagree quite a lot
- No, I disagree just a little
- ~~I'm not sure about this~~ **Forced choice**
- Yes, I agree just a little
- Yes, I agree quite a lot
- Yes, I strongly agree

Closed-ended questions (Multiple choice)

Advantages

- Ease of understanding
- Requires less effort on part of interviewer and respondent
- Ease of analysis
- Less error prone
- Less interviewer bias
- Less time consuming
- Answers directly comparable from respondent to respondent

Closed-ended questions (Multiple choice)

Disadvantages

- Middle/Neutral categories often selected inappropriately
- Less opportunity for self-expression or subtle qualifications
- Less involving for respondents
- Order of response categories can have major impact on results
- Difficult for preparation and pre-determination of answers

Things to avoid

1. Complexity: use simple, direct, conversational language
2. Leading questions - that suggest or imply certain answers
3. Loaded questions - suggest social desirability, or are emotionally charged.
4. Ambiguity and vagueness: Words such as “often”, “occasionally”, “usually”, “regularly”, “frequently”, “many”, should be used with caution. If these words have to be used, their meaning should be explained properly.

More things to avoid

- 5. Burdensome questions** - that may tax the respondent's memory
 - *How many tubes of toothpaste have you purchased in the last 3 years?*
- 6. Using double negatives**
- 7. Embarrassing, sensitive, or threatening questions:**
 - *Have you eaten more sweets than you should?*

More things to avoid

8. Long-worded questions

9. Double-barreled questions. Questions that refer to two or more issues within the same question. Where respondent may agree with only 1 part of multipart statement.

– *Do you like cheese or salami? Yes/No*

10. Making implicit assumptions

11. Jargon

Question Sequence & Layout Decisions

Initial stages

- Introduction to the topic – *e.g. in questionnaire on survey of contraceptive's usage among students – questions about sex life, general opinion on birth control etc.*
- Screening or qualifying Questions – *e.g. Are you sexually active?*
- Need to gain & maintain respondent's cooperation
- Opening questions should be interesting, simple, and easy to answer

Transition Questions

- Questions directly related to research objectives which require more effort and get respondent thinking about the topic – *e.g. types of contraceptives familiar to the person*

Basic - Difficult and Complicated Questions

- On the topic – e.g. type of contraceptive the person uses
- Respondent now committed

Identification - Classifying and Demographic Questions

- Characterize respondents on patterns of interest

Other Considerations

- Questions should flow logically from one to the next.
- General questions should be asked before more specific ones.
- Earlier questions should not influence response to later ones.
- Questions should flow from factual and behavioural questions to attitudinal and opinion questions.
- Questions should flow from the least sensitive to the most sensitive.
- Demographic questions should come at the end.
 1. **Initial questions - screening and rapport questions**
 2. **Middle - product specific questions**
 3. **End - demographic questions.**

QUESTIONNAIRE LAYOUT

The layout and physical attractiveness of a questionnaire are important aspects

- Questionnaires should be designed to appear as short as possible
- Questionnaires should not appear overcrowded
- Leave lots of space for open ended questions
- Questionnaires in booklet form are often recommended

OPENING

- Provide name of company doing research
- Provide reason for survey and topic
- Give information how the results will be used
- Give guarantee of anonymity
- Tell respondent approximate time to complete
- Reinforce that respondent's time is appreciated
- Invite to participate

AND CLOSING

- Thank for time
- Ask if they had a positive experience and remind them that their opinions count

Pretesting and Correcting Problems

Purpose of pretest: To ensure that the questionnaire meets the expectations in terms of the information that will be obtained

- Whether the question is necessary at all? – Does it serve the purpose? Will the information be of use?
- Missing important variables – Does it provide the information needed?
- Correlation between the questions and objectives
- Pretest Specific Questions For
 - Meaning
 - Task difficulty
 - Respondent interest and attention
 - Ambiguous, ill-defined, loaded, double-barreled questions
- Pretest the Questionnaire
 - Flow of the questionnaire
 - Length
- Respondent Interest and Attention

Questionnaire Design Flow Chart

Step 1: Specify what information will be sought

Step 2: Determine type method of administration

Step 3: Determine the content of individual questions

Step 4: Determine form of response for each question

Step 5: Determine wording for each question

Step 6: Determine sequence of questions

Step 7: Determine physical characteristics of questionnaire

Step 8: Revise steps 1-7, revise if necessary

Step 9: Pretest questionnaire, revise if necessary

Step 10: Implement

TYPES OF QUESTIONNAIRES

Interviewer-administrated Vs Self-administrated

Face to Face:

Telephone:



Structured/ Unstructured/
Semi-structured

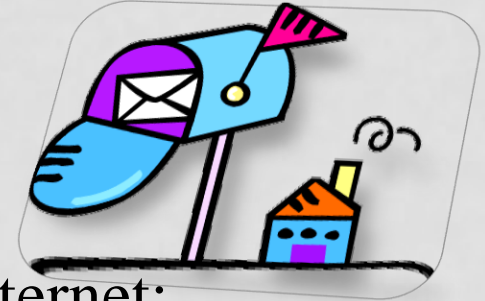
Personal/ Collective

Single time/
Repetitive (panel)

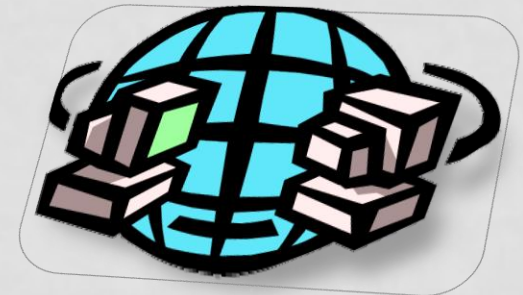
Direct Group

Direct individual

By post:



Email/internet:



Indirect

ADVANTAGES / DISADVANTAGES

Self-administered questionnaire (direct individual or postal):

Advantages:

- Cheap and easy to administer
- Preserves confidentiality
- Completed at respondent's convenience
- No influence by interviewer

Disadvantages:

- Low response rate
- Questions can be misunderstood
- No control by interviewer
- Time and resources loss
- Difficult to elicit detailed responses
- Less control over how the form is filled
- Cannot elicit additional information

ADVANTAGES / DISADVANTAGES

Interview-administered questionnaire:

Advantages:

- Participation by illiterate people
- Clarification of ambiguity
- Quick answers
- More detailed responses
- Greater control over filling out of response form

Disadvantages:

- Interviewer bias
- Needs more resources
- Only short questionnaires possible (Especially on telephone)
- Difficult for sensitive issues
- Quality of data depend upon the quality of the interviewer

Sociologists use the following methods

- Surveys
- **Observations**
- Experiments
- Secondary Analysis

MAJOR TYPES OF OBSERVATION

- Naturalistic
- Structured/ Non-structured
- Non-participant observation
- Participant observation

NATURALISTIC OBSERVATION

- General characteristics:
 - Observation in the respondent's natural social settings
 - Respondent's behaviour is examined and recorded without consent of him
 - Researcher has no influence on respondent's behaviour
- Advantages:
 - Spontaneous behaviour
 - Less disruptive
- Disadvantages:
 - Threat to confidentiality

Structured Observation

- ▣ Method relatively underused in social research.
- ▣ Systematically and planned observing behavior in a controlled environment.
- ▣ Direct observation of behavior and recording of the behavior and the recording of that behavior in term of categories that have been devised prior to start data collection.
- ▣ Explicitly formulated rules for observation and recording of behavior.

□ Advantages

- Observing direct behavior.
- Allows control of extraneous variable.
- Reliability of results by repetitive study.
- Provides a safe environment to study continuous concepts.

□ Disadvantages

- Control can effect behavior.
- Observer Bias.
- Imposing of irrelevant framework.
- Not possible to know intentions behind behavior.
- Unable to produce data a whole.

Unstructured Observation

- ❑ No use of observation schedule for recording of behavior.
- ❑ Gives narrative account of the behavior.
- ❑ Unplanned and informal.
- ❑ It studies behavior of respondent in the natural social settings.

▣ Advantages

- ✓ Broad overview of the situation and conditions prevailing in the society.
- ✓ Useful when subject matter is clear.

▣ Disadvantages

- ✓ Appropriate as first step.
- ✓ Not specific approach as it is the narrative description of observation.
- ✓ Problem of generalization.

Non Participating Observation

- ▣ Observer observes but does not participate in what is going on in the social settings.
- ▣ Planned and structured.
- ▣ Observer abstains himself from his physical presence in the social settings.
- ▣ Other sources are used to come to conclusion.

▣ Advantages

- Avoidance of Observer effect.
- Biased free.
- Low cost and less time consuming.

▣ Disadvantages

- ✓ Reliance on secondary sources which may be inaccurate.
- ✓ No identification of real problem and prevailing social settings.
- ✓ No in-depth study.

PARTICIPANT OBSERVATION

Participant observation is a method by which researchers systematically observe people while joining in their routine activities.

Participant observation research is descriptive and often exploratory. It is normally qualitative research, inquiry based on subjective impressions.

Participant Observation

FIELDWORK

- ▣ Best known method in social science research.
- ▣ Associated with qualitative research.
- ▣ Prolonged physical immersion of observer in a social setting in which he seeks to observe the behavior of members of that setting.
- ▣ In-depth study of the society and subject.
- ▣ Close interaction and relation between observer and subject.

▣ Advantages

- ✓ Insiders view.
- ✓ Researcher becomes an accepted part of the environment.
- ✓ Detailed study of social settings.
- ✓ Identification of real problems and elements that are leading to such problems.

▣ Disadvantages

- ✓ Problem of objectivity.
- ✓ Close relation affects study.
- ✓ Time taking process.
- ✓ Unstructured.

Documentation relies on memory, personal discipline, and diligence of researcher

PARTICIPANT OBSERVATION ALLOWS:

- Gathering data while experiencing subjects' social contexts with them.
- Gaining holistic perspective on social living.
- Understanding how things work.
- Obtaining real view of how people behave in their settings.
- Seeing guiding principles of an organization, setting, sub-group, or culture.
- Understanding how it feels to be a member of a given group

HOW TO CONDUCT FIELDWORK?

Phase	Description
Planning	You decide what you want to do, why you want to do it, what resources you need, and what research may have already been done on the same subject.
Collecting	You gather the information, make notes and observations about the information, its character, and the collecting events.
Analyzing	You need to index the field-collected materials for an archive, summarize them, and write them up.

PARTICIPANT OBSERVATION

- How many observers? More than one:
 - may remove bias
 - has higher costs
 - may change behaviors more
- Ways of recording:
 - Notes - include:
 - Description of setting
 - Identification of people
 - Description of content of the activities
 - Documentation of interactions
 - Description and assessment
 - Unanticipated things
 - Audio
 - Video

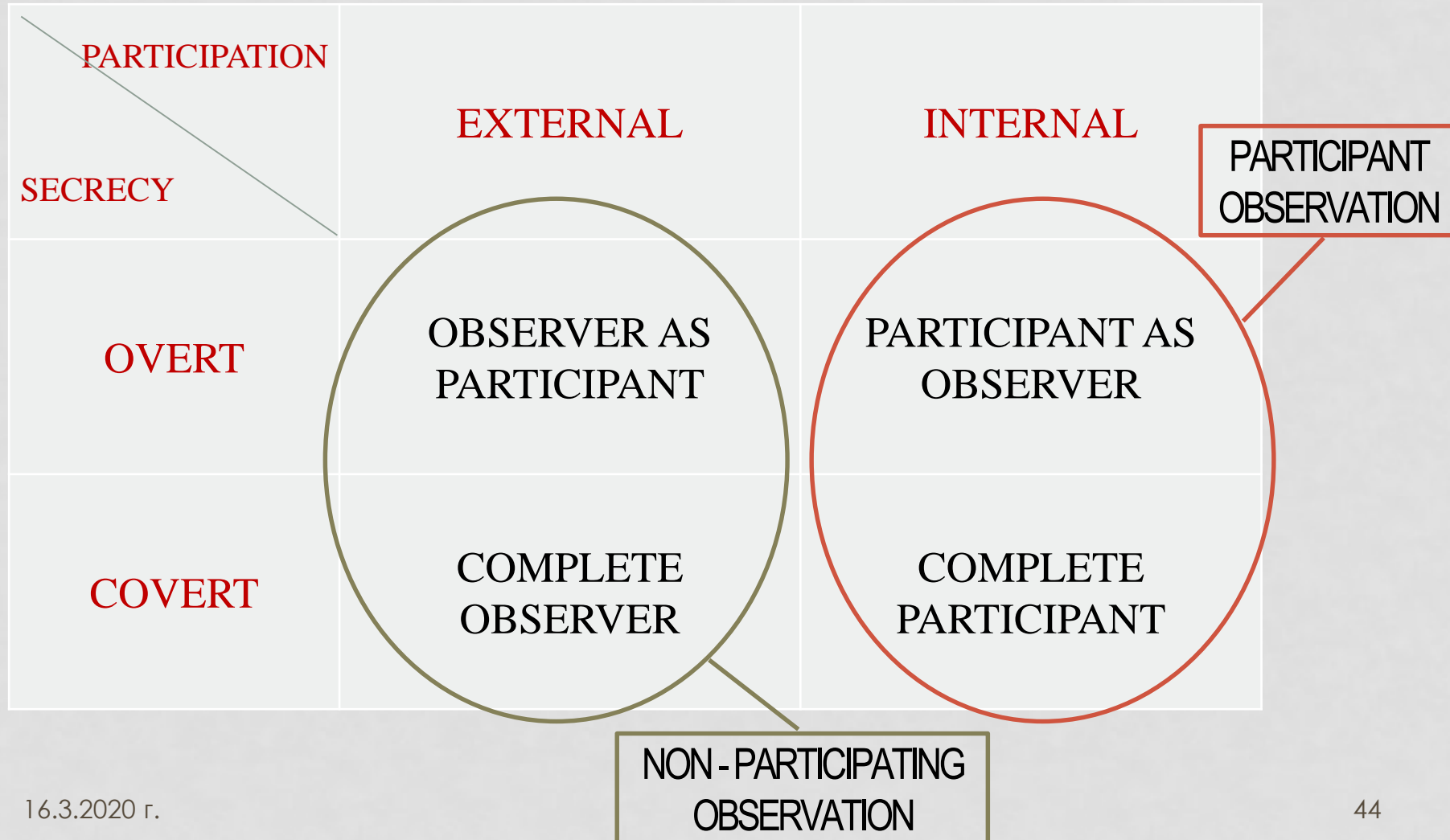
PARTICIPANT OBSERVATION RESEARCHER SKILLS

- For studies of different culture – know the language
- Be aware of what people are doing and saying. Otherwise you take in what you expected to see rather than what you saw.
- Good note taking skills.
- Patience.
- Practice Objectivity. Personal ideas can kill accuracy.

PARTICIPANT'S OBSERVATION SOCIAL ROLE

- Certain topics cannot be studied by other means. Some groups won't let you see anything unless you are part of their lives.
- Many settings are too intricate to be understood with piecemeal techniques.
- Helps formulate survey questions that are sensible and appropriately phrased.
- Participant observation is respectful of subjects. Rather than just hitting them up for data, you invest your time in them and treat them like experts in their setting.
- Pedagogically, research based in participant observation is often the most convincing, easily understood sociological research

ANOTHER CLASSIFICATION



Sociologists use the following methods

- Surveys
- Observations
- **Experiments**
- Secondary Analysis

EXPERIMENTS

- An **experiment** is a research method for investigating cause and effect under highly controlled conditions.
 - Experimental research is explanatory, meaning that it asks not just what happens but why.
 - Typically, researchers conduct experiments to test **hypotheses** - unverified statements of a relationship between variables. Most experiments are conducted in laboratories and employ experimental and control groups.
 - The Hawthorne effect is a change in a subject's behavior caused by the awareness of being studied.**

Sociologists use the following methods

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- Observations
- Experiments
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SECONDARY ANALYSIS OR ARCHIVAL RESEARCH

A research method in which a researcher utilizes data collected by others.

DOCUMENT REVIEW

- Quantitative analysis
- Qualitative analysis

QUANTITATIVE ANALYSIS

- The researcher might count the number of words spoken/ the number of activities done by each participant.
- The quantitative measures could be used to test various hypotheses such as *sex differences*.

QUALITATIVE ANALYSIS

- **DESCRIPTIVE QUALITATIVE STUDIES** - The purpose is to provide a detailed description of a particular set of circumstances and to encourage the reader to make their own interpretations – *e.g. publication of interview transcripts*
- **THEORETICAL QUALITATIVE STUDIES** - They attempt to develop theories and concepts and to verify them.
- **ANALYSIS TOOLS - CODING AND THEMATIC ANALYSIS** - steps
 - the researcher develops close familiarity with the materials;
 - all the concepts, themes and ideas are noted to form major categories;
 - a number or label is attached to each category;
 - the researcher records the position of the labels in the transcript and counts their frequency;
 - the researcher attempts to interpret codes' meanings in the context in which they appeared.

EXAMPLE – STUDY OF THE CONCEPT OF GOOD DEATH AMONG PERSONNEL IN HOSPICES

OPEN-ENDED QUESTION: WHAT IS YOUR IDEA OF “GOOD DEATH”?

SHARED IDEAS	In-patient hospices		Home hospices		Palliative care unit		Total	
	n	%	n	%	n	%	n	%
Death without pain and suffering	78	76,5	20	74,1	47	77,0	145	76,3
Death in the neighbourhood of significant ones	13	12,7	10	37,0	23	37,7	46	24,2
Death at home	23	22,5	8	29,6	19	31,1	50	26,3
Death in one's sleep	44	43,1	14	51,9	17	27,9	75	39,5
Control over death	5	4,9	4	14,8	9	14,8	18	9,5
Not answered	5	4,9	2	7,4	6	9,8	13	6,8
Total	102	*	27	*	61	*	190	*

THE SCIENTIFIC METHOD

