

**Research Methods in Health Promotion**  
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**Week 05**  
**Lecture 21: Qualitative methods in Health Promotion (Part I)**

In our session in research methods in health promotion, we would now be dealing with qualitative methods in health promotion. The concepts covered in this session will include what is qualitative research, why such research is necessary for health promotion, basic characteristics of qualitative studies, basic differences between quantitative the oft done studies and qualitative studies, research design, research strategies in qualitative studies. So qualitative research is required in health promotion for various reasons, some of which include understanding the diverse causes or the determinants of the problem, whether they are due to biological factors, behavioral factors, social factors or environmental factors, whether they want to develop solutions or interventions that will help to either prevent or mitigate the health problem in question. Sometimes qualitative research is also used to facilitate better implementation or delivery of solutions through evidence based policies and programs, the evidence of course being generated through the research. It is also used for evaluating the impact of these solutions on the level and distribution of the problem. And it is important to remember that like all other research, research in health promotion will also follow certain steps which are more or less the same.

So qualitative research is a field of enquiry which involves and is characterized rather by its naturalistic and interpretative practices. These two words are very important in qualitative research. Naturalistic because qualitative approaches take place in the natural environment wherever the participants are residing, working or whatever. It is not in settings where control is an important factor.

So it is a naturalistic setting and it is interpreted that is it constructs meanings from the data. It tries to interpret the data with the aim of explaining the phenomenon under study, not only the numbers, but explaining the phenomenon. It is contextual. The procedures are in depth. So it allows for rich exploration of complex social experiences and phenomenon and that is what is the beauty of these types of research.

The basic characteristics of qualitative studies. We all have perhaps done some form of qualitative studies or not done also, but we have to remember that here the information is gathered by talking directly to people and seeing them in behave and act in their own natural settings in their real context. The data is collected and interpreted by the researchers which is a very important point. The third important characteristic is that we can collect various forms, multiple open ended forms of data are collected in which the participants share their ideas freely. That is a very important characteristic again.

It is not constrained by predetermined scales, predetermined instruments, but it is flexible. The researchers then review the data, understand it, organize it into codes and themes. So the interpretative part comes in here. Typically, we follow an inductive method at first which moves from bottom upwards. We organize the patterns evolving out of the data, categorize them, put it into themes and more generic units of information.

Then the researchers look back that is deductive. So researchers look back at the data from the themes again to determine whether they need additional information for supporting each theme that is the deductive part. So it has an iterative, inductive and deductive part. The focus again is on understanding the meanings that the participants attribute to the problem not the researcher. The initial plan for the research therefore, cannot be tightly prescribed unlike quantitative forms since some or all the phases of the process may change or shift after the researcher starts collecting the data.

Questions may change, forms of the data collection may shift and obviously, the individuals studied and the sites visited again can be modified as the researcher moves deeper into the topic. Once again, because the interpretation is done by the researcher, the researchers personal background, culture and experiences influence the interpretations and the meaning they attribute to the data. So one has to be very cautious. A holistic picture of the problem evolves from multiple perspectives which is very important. This multiple perspective is the beauty of qualitative again.

So it identifies many factors involved in a situation. This is not a linear cause and effect model, but trying to unfold the multiple factors interacting in different ways in the actual setting. So there are certain basic differences between quantitative and qualitative studies. Where are qualitative research suitable? When there is no plan for quantification of the data. We do not need numbers.

When the researcher wants to know how and why than whether and how many. So when the researcher wants to learn what the target population believes about a specific subject, one obviously has to go in for the qualitative research. When the researcher wants reactions, ideas, feelings of the target population in their own words which is so very important. And when the researcher wants the freedom to probe beyond initial responses that flexibility is built into these types of research designs or when the researcher is studying sensitive or difficult topics where there is a range and wide range of diversity and intensity of opinions. So and we want to capture that.

But again qualitative research will not be suitable when there is need for statistical data where we need yes no answers or scaled answers, rated answers or when the researcher cannot ensure free expression of the participants. It is not possible. So in that case we cannot conduct this

research or when the researcher knows that the participants have problems with the social aspects of group participation more often than not we rely on group participation. So this is an important factor as well. And finally when the researcher has language barriers because it depends upon a lot of discussion, lot of language is necessary, language skills.

So it cannot be done in these cases. The other differences between quantitative and qualitative is that whereas quantitative confirms hypothesis about phenomena. It aims at testing existing theories. It focuses on deductive reasoning. We have something a hypothesis and we try to deduce from the data collected.

It moves from broad generalizations to specific observations. On the other hand qualitative explores phenomenon. It aims at developing a theory. It focuses on inductive reasoning as I have already mentioned before. It moves from specific observations to broader generalizations and we will study later how it does that.

Examples of quantitative include KAP surveys very commonly done, structured interviews, structured observations whereas qualitative mostly is done through in-depth interviews, focus group discussions, participant observations and such other methodologies. Quantitative obviously uses more rigid instruments for eliciting and categorizing their responses and assigns numerical values to those responses and then follows structured methods like questionnaires, surveys, structured observations. It quantifies variation. It predicts causal relationships. It describes characteristics of a population whereas qualitative uses more flexible instruments like discussion guides, probes to get the inner feelings, meanings, opinions, etcetera.

Quantitative answers questions of how many and how often. It uses a series of closed ended questions that offer the respondent several choices when answering a question. For example, was your child immunized for polio? Yes, no, do not know. Closed ended questions however limit the kinds of responses that can be recorded. So, it keeps the data organized, but limits the options.

It limits the ability to probe the responses. One may not be able to ask participants why they do not know if their child was immunized for polio. Just get the answer and quantify it. It follows the same study design from beginning to the end and participant responses do not influence, modify or determine how and which questions the researchers will ask. Qualitative on the other hand answers questions of why and how.

It asks open ended questions. It allows respondents to give detailed answers. So, it reveals the biases, the extent of their knowledge, the gaps in their thinking like the same question why is immunization necessary might reveal a whole range of answers that can also help in addressing the communication or the informational needs of the audience. In qualitative we

usually record data in open ended textual format. Audio tapes, video tapes, field notes all of these are used for the categorizing and recording the data.

And the elicitation and categorization of responses this is most important it may be modified progressively depending on participant responses. So, quantitative again provides a measurement of the audiences responses in numerical estimates as we have said like 40 percent of young adults reported wearing masks in public places whereas, qualitative provides in depth understanding about the audience responses. For example, after coming to know the mortality rate due to COVID-19 was less in young adults they do not feel the need to wear masks in public places. So, why that only 40 percent was using is elicited through qualitative. Quantitative deals with objective measurable behavior knowledge and attitudes whereas, qualitative will deal with the contextual and emotional aspects of these same issues.

Large sample size in quantitative is taken it involves large numbers of participants interviewers. So, this type of research is usually expensive more expensive than the qualitative ones where we have smaller sample sizes it involves small numbers of participants and interviewers usually making it a less expensive type of research. Quantitative includes questions that are straightforward to ask and get an answer whereas, qualitative will yield results that are more difficult to analyze it requires thinking contemplation organization and interpretation. It is rich with details it will provide answers to questions no one thought of asking before also. Quantitative draws firm conclusions the results of which can be general generalized to the population at large whereas, qualitative is more about insights.

Insights into attitudes, beliefs, motives, concerns, fears, doubts, behaviors it can be used for providing deeper meaning to these quantitative findings. Coming to research design, research design in qualitative is a non-linear process as we said it is emergent and the stages are interdependent. One stage informs the other not necessarily in a linear chronological manner. Design decisions can and should be revisited and reconsidered throughout the study on what is learned and what additional data is needed in order to answer the research question. So, as we said it cannot be very hardly fixed or rigidly fixed right in the beginning.

The research design must have what are you asking the research question, must have how are you asking it the methods used or theoretical positions or perspectives which you want and what data will you need in order to provide a good answer. These are the three essential things which we need to know when we are formulating the research design. The approaches to qualitative include ethnography. Ethnography has been long used in anthropology. Its main focus is the exploration of the insiders point of view, the participants view that is called the emic perspective.

Ethnography can help greater understanding of behavior surrounding health and illness. For example, how the effectiveness of therapeutic interventions can be influenced by patients

cultural practices and how ethnocentric assumptions on the part of professions like I have bias towards certain cultures, certain context that can impede effective health promotion. So, ethnographers use a various types of strategies for their research. They use participant observations, interviews, focus groups, field notes, video etcetera many types. Multiple kinds of ethnographies have also developed over time some of which are like institutional ethnography or auto ethnography.

Just to mention them institutional ethnography links the barriers and difficulties participants experience to specific features of the health system. Like how institutional processes are linked to cancer disparities experienced by women in the study. These were studied in some areas of the world. Auto ethnography draws on ethnographic practices linking the personal to the cultural, the self narrative, the family's experience of dementia and relational experience aspects of this experience. So, you understand these are issues which need to be understood, need to be the evidence needs to be provided for better policy making and program design in these areas.

The second thing second approach is phenomenology. It seeks to explore describe and analyze a lived experience. People go through various experiences we try to explore that experience. The researcher identifies an experience say pain. Participants who have experienced the phenomenon are recruited and the researcher works to develop a description of what was experienced, how they were it was experienced etcetera.

So, after having prepared this one should get the phenomenological nod. The audience should experience a resonance you read it out to the audience what you have understood and they should give you the nod. For example, studying parents experiences of carrying their neonatal baby from hospital to home environments. Now, transferring the new baby can give rise to unexpected anxieties, pain, worries etcetera. This particular study they have done has implication for health care teams which provide care to neonatal infants and their families.

The other most important and commonly used approach is the grounded theory approach. The grounded theory focuses on deriving a theory or theories from systematically collected and analyzed data. This is of increasing importance nowadays because just like proper clinical management, proper behavioral management and bringing about behavior change depends upon formulating it according to theoretical models and frameworks which have been proved to change behavior. So, it is a method of comparing and contrasting data in order to establish categories and the relationships among these categories to develop a theory which explains what is being studied. This process continues until it reaches saturation.

So, till we have no further new information like this example of Canalis and Geller in 2005-4 conducted a grounded theory study examined decision making regarding mammography for breast cancer screening among women who consistently got yearly mammograms women who

were inconsistent or failed to get annual mammogram and breast cancer survivors. So, they had three categories and from this data they developed a theory which they termed moving in between mammography which described how this decision making was done and identified several factors that influenced this particular behavior. Another important approach is the narrative inquiry. It is a method where stories, stories are very important in understanding why people do what they do. So, this is a method where stories are understood as a social process and individuals make a meaning which is known as construct of their experiences in their stories.

The researchers listen to and record the narratives about experiences of the individual and discuss the meaning of the experiences with the individual. So, again researcher is interpreting a story here. Narratives rely on written or spoken words or visual representation they can even draw diagrams they can actually show you pictures all this is taken as data in a narrative inquiry. For example, narrative methodology can be used to explore the views of men and women about cardiovascular disease and the emotions and social relation that were involved in their personal experiences of cardiovascular disease. These findings pointed to the gendered and social influence on participants efforts to negotiate healing and rehabilitation.

So, this is a very good study involving narrative inquiry. The other approach which I would like you to know is about the case study. Case study is a wonderful method which can be used to generate in depth multifaceted understanding of a complex issue in its real life context. We have seen many such case studies in many modules and, but we can generate it as a research approach and use the data thereof. The case study allows critical events, interventions, policy decisions and program based services to be reformed.

The final type of approach which I will be discussing today is observation. Observation is a very important method for data collection used in qualitative research we just observe what is happening around them. So, physical surroundings, behaviors etcetera while recording these observations and interpreting the field notes. But it has a structure it is not just seeing just like that in non it can be participant or non participant. In non participant observation the investigator observes certain behaviors of the people he or she is studying.

You can do it covertly without the person knowing or overtly in real life setting. It is a special skill it involves careful forethought thinking beforehand. It has a protocol that ensures data are collected systematically and relates to the addressing to addressing the research question. The steps are like you have to select the site get permission to access, determine who or what is the focus of observation, how long will you do it, how will you do it, role of the observer, what will you do, will they just participate or be doing it from the outside, develop observation processes for documenting notes and finally, plan for how to enter and leave which is very important you just cannot start and end arbitrarily. Participant observation on the other hand is often employed for learning about unexamined practices we do not know really what is happening.

So, you become a part of the group participant observation of family group meetings to study the impact of cancer on family relationships among patients. Based on their findings the researchers highlight the need for practitioners to focus on the entire family when designing interventions to help patients cope with cancer. So, one can do studies like this. Another study which can be used as an example is the ADAM study where they use multiple methods of data collection along with observational techniques as well to elicit children's views about the hospital environment. They did it among children in the hospital for sick children in Toronto and then their findings started to address the significant gap in understanding the relationship between the perceptions of children and the settings where their health care is occurring.

So, these are again new areas where work can be done. So, finally, what we have understood about qualitative research methods is that a qualitative research is a field of enquiry characterized by its naturalistic and interpretive process and that is required in health promotion for various reasons. We have talked about naturalistic which means it is done in the actual context where the participant is behave participant behavior actions and practices are taking place. And interpretive means we are actually analyzing the meaning which the participant attributes to those particular feelings, opinions, behaviors, practices whatever. So, the interpretation obviously, is done by the researcher and the focus is on unfolding the meaning that the participant is attributing to the problem not what the researcher is understanding more on what the participant is attributing. Thirdly, typically we follow an inductive method in the beginning that is the bottom up and to organize the evolving patterns first understand the patterns then categorize them then put them into themes and depending upon the approach one uses the grounded theory or ethnography we use theories, we use models, we use frameworks to put them into increasingly more general units of information.

Then we look back into the data go from top again to the bottom to see whether there is additional information that is necessary to explain further what we have understood. The initial plan for research cannot be tightly prescribed which is a very important understanding in qualitative research because as the phases proceed we might need to change or shift after we start collecting the data. Qualitative research is suitable when the researcher wants to learn what the target population believes about a specific issue, wants their reactions, their ideas, their feelings about a particular issue in their own words. The researcher is or when you want to study sensitive topics, difficult topics where the intensity of the opinion is very important and it cannot be captured through quantitative studies. The research design is non-linear as we have already said it is emergent it can be changed and the stages are interdependent not necessarily one after the other.

Some approaches to qualitative research include ethnography, we have discussed it, phenomenology, grounded theory, narrative inquiry, case study, participant and non-participant observation. So, these have been some issues which are the approaches which have been discussed. These are the references which you can look up if you need to delve further into it.