

**Research Methods in Health Promotion**  
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**Week 05**  
**Lecture 22: Qualitative Methods in Health Promotion (Part II)**

As we proceed into the further details about qualitative methods in health promotion, we will be dealing with how to choose a research method, what are the principles of sampling for qualitative research, and actually selecting a sample for qualitative study. Now, in choosing a method, one has to always remember that the method chosen depends upon the aim of the study and the research question. That will direct all approaches and designs. So, before we choose a method, we have to be very clear about what we want to find out and what is the research question.

For example, researchers interested in emergency room practices might approach the topic using different qualitative methods depending upon their aim. Now, if you have different groups of researchers doing the same topic, if they were interested in understanding how the cultural practices of an emergency department shape patient experiences, they would likely to, they are likely to use some ethnographic approach. On the other hand, some may want to understand the experiences of emergency patients waiting for admission in a hospital where there is a shortage of beds. So, here phenomenology, they are undergoing an experience, a phenomenon.

So, that can be researched, that would be a possible research approach, the phenomenology. Another group might be interested in explaining the social processes influencing the family members' decisions to access the emergency ward upon experiencing the pain. Now, obviously, this decision making process goes through stages or steps. So, it might use the grounded theory, fit it into some theory, some model, some framework which can explain the decision making process. Another one group might be interested in how patients make meaning of their experiences of accessing the emergency department.

So, obviously, since they will have to describe their own experience, the meanings they attribute it to, so this description of the acute illness episode might turn to narrative methods. So, you understand in the same setting, different questions, different perspectives can be understood, can be researched, only the method selected can be different depending upon the type of study and the research question. Now, which qualitative research design is right for you? We have already spoken about phenomenology. This is actually to understand the essential meanings constructed through a lived-in experience. Some person have gone through some experience, you really want to find out what it has meant to them.

Case studies, they give you a lot of descriptive exploratory or explanatory findings, because they are certainly one of the most versatile methodologies which are used in qualitative research. Grounded theory, we have already told you that this is essential to construct a theoretical model that explains this phenomenon of interest, as we said decision making by family members of patients attending the emergency room. Coming to ethnography, obviously, when we would like to understand the complex social and cultural phenomenon within specific settings, we would go for ethnography. And obviously, you can do neither of these or none of these and just do a general qualitative enquiry as well. Because if the design does not mesh into any of these, obviously, you still can do a qualitative enquiry.

Now, just to give you an example of the general distinctions between the qualitative research approach. Now, you can see here in this example that all of them have researched on breast cancer, but some have done a grounded theory approach. The research question has been how do women with breast cancer cope with changes to body image. The analytic strategy was a constant comparative analysis, which is basically the method used for grounded theory. And what came out in the end was a theory regarding basic social processes involved in coping with the breast cancer and factors that might account for variations.

Some can choose phenomenology, like the research question was what is the lived experience of having breast cancer. Here the analytic strategy was like phenomenological reduction, hermeneutic analysis. You need not remember all this, but the important thing is just we go for qualitative analysis of the lived-in experiences. And what you get in the end is description of the essential structure of breast cancer experience, what people go through. The third important method used for the same problem was ethnography.

How is breast cancer understood and managed in different social contexts. So, here what did we use as a strategy? What can we use? Representation, inscription, translation and textualization of the culture into writing. What does the culture, how, what role does the culture play in the experience? How is it in understanding breast cancer, the role of the cultural context, the social context, this can be understood. So, what in the end we get is a typology of interpretations. People interpret each illness in a particular way, depending upon their socio-cultural background.

So, this typology can be found out, the relations can be found out, the variations can be found out of breast cancer experiences through ethnographic research. Finally, here some people can do narrative analysis. Question being how do women with breast cancer come to know their experience? So, here what we have tried to do is generating, interpreting and representing women's stories in a narrative form. So, you collect stories from a group of women of different categories and try to generate some inferences, some interpretations and some representations from these different stories. What we get in the end is a narrative account of different women's explanations for their experience.

So, that can only come out through stories told by them. Now, which brings us to the next important question, what then in quantitative methods sampling plays a very important role? So, it does also in qualitative. Now, sampling in qualitative research is of a different kind. In qualitative designs, participants are selected based on their relevance to the research topic in question. First of all, their selection is based on the question or the topic, the conceptual framework which we are adopting and the method being employed.

So, once we always have to decide these beforehand before starting on our sampling procedure. Thus, rather being informed by a commitment to statistical representation which is very important in quantitative, sampling decisions in qualitative are driven by selecting participants who can provide the greatest insights regarding the particular phenomenon of interest, which we will lose if we do random sampling as in quantitative surveys. Based on these, there are a number of different sampling procedures. Now, some common ones will be discussed here. The first one is theoretical sampling.

Here the participants are selected based on the emerging theoretical framework. As you get the initial, as we said right in the beginning, it is flexible. You can keep changing, you can keep adding participants, you can keep adding methods. So, here as you start collecting data and start building on some framework, participants can be selected to elaborate and refine these emerging categories and theory. So, theoretical sampling is that and this is a core aspect of grounded theory.

Those who would like to do constant comparative analysis for emerging grounded theories, then we go for theoretical sampling. The second common method is purposeful sampling. I would purposefully select the best participants based on the quality of their insights. I know that out of these three people, this person is the one who would be providing me the best quality of insights. So, I have purposefully selected him or her.

And again, sometimes samples are also selected on the basis of their willingness to reflect upon the phenomenon of interest. Sometimes people are non-committal, they would not like to speak to you about it. So, obviously, even if I mean randomly you cannot select these people, you have to select people who are willing to give you the information. Who or what data can give me the most and best information about the topic. Third is snowball or chain sampling.

Participants in the study are asked to invite others who meet the sampling criteria. As you are perhaps aware by this time that this type of sampling is not an easy job, particularly when you go into a community with a sensitive topic or with something which we are not, which is not brought to the light easily. So, in these cases snowball sampling is very important because it is the participants, initial participants who will be knowing people undergoing the same experiences. So, that is the sampling criteria. They can contact the researcher if they are interested in participating.

And of course, what we always do is convenience sampling. Participants are selected based on their availability to participate. So, samples for qualitative studies are small. We all know they are small. The sampling error of a small sample is likely to be large, that is also true.

And sampling biases that is the difference between the sample and the population it represents is inevitable. So, studying a random sample you would say that why not a random sample then. Apply the methods with a random sample, but a random sample will not provide the best opportunity. Of course, it provides good ways to generalize the results, but it is not an effective way of understanding the complex issues relating to human behavior. Why? Because for selection of a truly random sample, the characteristic under study should be known for the whole population that is the basic undertone or the fulcrum of selecting a random sample from a population.

But in a qualitative study with so much complexity, it is rarely possible to know this. Secondly, random sampling of a population is likely to produce a representative sampling only if this particular characteristic not only is it known, but it has to be normally distributed within the population. Available evidence indicates that the values, beliefs and attitudes that form the core of this qualitative investigation are not normally distributed. So, we cannot take a probability approach. And finally, all people are not equally good at observing, at understanding and even expressing or interpreting their behavior and that of the people around them.

So, some informants are more likely to provide better responses, better insight, better understanding. So, they can be missed in random sampling. That is why qualitative studies are different. Samples has determination for qualitative studies. Now, so if it is not random, if it is not statistically determined, then how do we decide on the ideal number? The ideal number of participants that constitute a valid observation, for example, number of participants in focus groups or the number of focus groups, they are there, but there are no rules on how many observations are required to get valid results.

We cannot prescribe a number beforehand. In theory, sample size in qualitative designs should be determined by the saturation principle. You go on doing interviews are conducted till additional interviews provide no additional insights into the topic. That is our gold mark or gold standard that no further new information is coming. At that point, we decide that we have had a total saturation and we do not need any further samples.

Appropriate sample size in qualitative research depends upon nature of the topic. It depends upon the amount of useful information we have been able to extract from each participant or source. It depends upon number of interviews per participant, like some designs we cannot do

interviews more than once. So, obviously, that requires time and qualitative method and study design chosen. That also sometimes will determine how many samples we can take.

So, we had talked about two other methods of sampling. One is convenience sampling. This is the most widely used technique where we select most accessible subjects and purposefully take them in the study. It is least rigorous, least costly and that is why we it is done all over. It requires very little time, effort, money.

Participants are chosen according to preselected criteria relevant to a particular research question. Of course, we just cannot take any person has the participant characteristics have to be relevant. For example, a class of students, a support group of people with cancer, people in a vaccination clinic. So, these sample sizes we can fix prior to data collection or we may not also fix before data collection. It depends sometimes on the resources available, on the time available for the researcher, but of course, it also depends upon the study objectives.

Another sampling method which we use for qualitative studies particularly when sensitive topics or atypical topics are being done is venue based time sampling. Recruitment of venues where population of interest gathers like say commercial sex workers or drug users. These are sensitive topics and there are particular places where you will find them. So, here we do a first stage sampling of the venue. The second stage sampling which involves not only the venue, but also the day and the time because there they do differ.

And the third stage sampling ultimately the individuals within the sample. So, this is basically used for hard to access or hard to reach populations. It is very difficult to get them through traditional probability sampling techniques as I said like commercial sex workers, injecting drug users, seasonal migrants where we cannot do a convenient sampling of any other time. We have to go to the venues where they aggregate. We have to select the time at which their population will meet the required number and then of course, from those numbers you select a sample.

So, it is a two stage, three stage sampling design. So, venue based time sampling in the first stage there is in-depth interviews conducted to identify all potential venues which the targeted population might visit. For example, street corners we are talking of sex workers or drug users. We can try to find out which are the street corners where they accumulate the parks, the bars, the restaurants. Now, once the venue universe has been identified, enumeration of specific days and times that will yield the most potential participants.

There are lean days and there are busy days. So, we have to find them out and determine which will give us maximum number of participants. Next, the number of targeted population who visit the venue during these days and times are counted, so that the best days can be

selected. And finally, the final sampling frame is devised with all the potential venues, day times from which a random sample can be drawn. In the second stage, there is actual recruitment of participants at the venue through a systemic approach. So, an imaginary area is predetermined and potential participants who cross into the area are approached.

Screened for eligibility, if they are eligible they are asked to participate. So, systematic selection of the venue reduces selection bias which is very common in convenience sampling. So, obviously, sampling is an important issue in qualitative research. It too has to be done carefully, keeping in mind what we are trying to find out, how we are trying to find it out and what method will give us the best results. So, choosing a research method needs careful consideration in health promotion research.

Always for every step of the study or the research, we have to be careful and keep at the back of our mind the aim of the study and the research question. This has to be revisited and visited every time we go through a particular stage or device or design or implement a particular stage. The five commonly used approaches which we have discussed include ethnography and we have mentioned that it is the cultural and the social context which adds meaning to an issue. And if we really want to understand how that social cultural context is influencing the meaning people attribute or the opinion of people in a particular issue, then it is good to go for ethnographic studies. Phenomenology again gives us a good insight about what people have experienced.

A particular phenomenon has been experienced by a group of people. We would like to know what was it or how was it that they went through this experience. The third popular thing which is done and increasingly being done is the grounded theory method, where we try to find out all their inner meanings or the beliefs or their opinions about a particular issue or their experiences and then try to categorize them. Categorize them to fit or to evolve or to get an emergent theory or framework. This is constant comparative analysis which helps us to categorize.

And then we do deductive inductive both to find out any additional information would be needed to prove or disprove the theory or how the theory fits into the existing theories or frameworks or it does not fit into what other constructs can be added or modified. Case studies have been used extensively particularly in maternal health, child health. There has been lots of examples of case studies, but they can be increasingly used in many other studies also to provide from the interpretations derived the necessary evidence for influencing policies and programs. And as we said, it might be that the qualitative method which we are planning to do does not fit into any of these measures, but we can still do general qualitative inquiries to give us that intensity and the in-depth into the insights, which reveal the actual underpinning or undermined beliefs, opinions, etcetera which are influencing behaviors and practices related to health or the issue or question. Now, based on this the qualitative designs again participants have to be selected.

Again keeping in mind the research question, keeping in mind the aim of the study and their relevance to the research question participants are selected. So, we do not go for a commitment to statistical representation here. Sampling decisions are driven by selecting participants who can provide the greatest insights, which is very important, but at the same time as discussed there are definite protocols and definite methods which have to be followed to sample a population for inclusion in qualitative studies. Based on these findings or based on these decisions there are a number of different sampling procedures.

Four common ones are one theoretical sampling. We have spoken about it. As theories emerge from your finding if you are doing a grounded theory study through constant comparative analysis as you get categories and themes and you try to fit into some framework or develop a framework or model of your own, you might need additional information. So, you take additional participants as you go along. So, that is basically theoretical sampling. There is purposeful sampling very commonly done, but that too needs to follow certain patterns.

It can be snowball sampling. As we said there might be issues where you really do not know a particular behavior how it is distributed in the population. So, you can get some of the participants whose behavior is known and ask them to recruit others who will help you to get better results. So, which is not possible for the researcher to know if particularly if they are coming from outside the community. And finally, convenience sampling where the persons are selected based on their availability to participate. At the same time we have talked about also venue based time sampling which is very important and can be followed particularly for sensitive topics like commercial sex worker, injectable drug use or perhaps where you will not get participants throughout the year in a particular place like migrant workers.

So, these are some of the methods of sampling and these are some of the considerations which we have to keep in mind when we are trying to do research in qualitative methods. So, these are some of the references which you can go into to get better understanding or more detailed understanding of this process. Thank you very much.