Research Methods in Health Promotion Prof. (Dr.) Madhumita Dobe Chairperson,

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Lecture 25: Qualitative Methods in Health Promotion (Part V)

So, we have spoken at length the different qualitative research methods which can be used for research in health promotion. But there are challenges, there are limitations, of course there are strengths but there are weaknesses also. So, in this session we will be discussing a little bit about these issues. We will cover the common concepts, a summary of it. We will cover basic classification of the broad types as recap. We will look into the strengths and weaknesses of qualitative research, look into the limitations of qualitative research, the challenges of qualitative research.

We were talking about certain specific problems of multi-centric qualitative research and now as increasingly I have been focusing on using social data for qualitative research. So the common concepts just as a quick recap are that qualitative researchers they study things in their natural setting. So the natural was an important word attempting to make sense of or interpret. So it is natural and it is interpretive.

These are the two characteristics. So basically interprets the meanings people bring to issues. The second important concept is that qualitative method has the common purpose of creating a model for in-depth understanding of the links among elements. So not only some isolated understandings but the links between them. So exploring the order that is invisible to ordinary examination.

So when you look into these Weisenhals some pattern evolves, some order evolves that is important. Third is that process is particularly powerful here not only the product that is not the mathematical end product but the process by which the outcomes have been arrived at. The inductive reasoning relates to the fact that these researchers would ground their work on field data further exploring individualities and collecting information that would gradually help to build up a plausible theory for changing health related behavior or understanding certain practices behaviors decisions beliefs opinions etc. And it is an emic centered. Emic means that interpretations are made from the interviewer's perspective not from a discussion from the researcher's view or the available literature's view.

So we are emic. There are three broad types of qualitative research. We can use qualitative research for exploratory studies where nothing is known right now. So aim is to understand some new knowledge by exploring some topic about which nothing is known yet. Then or they

can be used for descriptive studies which aim to build upon exploratory data by comprehensively describing the topic or specific in a specific context right.

So first of all I knowing what is there then knowing further details about the thing which has been isolated or identified and finally comparative studies. They can also be used to systematically compare and capture how well defined the topic varies across different contexts. So these are commonly the ways in which qualitative and the applications where qualitative research is used. As I was saying there were strengths and weaknesses. There are limitations.

The strength is that it complements and refines quantitative data. This is apparent by this time. It provides more detailed information to explain complex issues. So now with increasing emphasis on social determinants, the social norms, the socio-ecological model this is something which we all need to follow, understand and implement. It allows for multiple methods to gather data on sensitive subjects and data collection is usually more cost efficient.

Whereas the limitations are that findings usually cannot be generalized to a whole study population or a whole community everywhere. It is more difficult to analyze. It does not fit neatly into the standard categories that we know, but again that is the beauty of it. We can find new things, we can innovate, we can explore, we can analyze and perhaps fit them into new models, new frameworks etcetera. And the data collection and analysis is we usually very time consuming particularly the analysis.

Limitations are that there are possibilities, small sample sizes, potential bias in answers we have already discussed it. There is a self-selection bias and potentially poor questions from researchers and more than anything the Hawthorne effect is very much applicable here where the meaning of this is that the participants change their behavior or performance when they know that they are being observed. Put it very simply this is the Hawthorne effect which can be evident particularly in observational studies participant and less in participant more in non-participant observation. So, this is another limitation of the qualitative research study. What are the challenges? Challenges come in choosing a method though we can very simply put it and say well look into your research design, look into your research question and then choose a method.

But as I said earlier the process emerges as we go on collecting data. So, one method which was chosen earlier might not be fitting later on. So, you can always modify, be flexible, change, add this sort of an open mentality has to be there. So, choosing a method has to be based on certain considerations, but it allows to add on more. Avoiding bias, the researcher is interpreting whatever is there.

So, the bias of the researcher gets reflected also. So, the researcher has to consciously avoid all bias in interpretation. Ensuring accuracy and consistency, this I will deal with a little bit more in detail when I deal with multicentric studies, but since this happened this is happening this is a subjective interpretation and collection which is happening all over. So, to ensure accuracy and consistency without the support of numbers becomes a very difficult consideration. And managing tons of data, actually if you do a good research and you really gather lots and lots of data it is very difficult to condense, to analyze, to extract, to code, to theme all this I would not say impossible, but it is difficult.

We were talking about a particular difficulty in multicentric qualitative quality assurance. Now, while each researcher collects data in their local settings using their native language when you are putting such studies together a common language for coding and analysis is required to facilitate sharing of information also to disseminate these findings to a wider audience. So, basically what we need to do is develop codes for data analysis in our case in English. So, that they could be shared, but language fidelity and fluency of the participants in the respective centers might require that the analysis also should be conducted in the original language and then it can be translated sometimes it has to be done in that way. Researchers in each center and I have said this earlier generate a list of narrative codes as they complete the stakeholders, interviews and focus groups.

These generated codes need to be circulated between researchers in each of the centers there needs to be debate, there needs to be discussion and development of a shared code book. You can do it through face to face meetings, you can do it through conference calls, even email correspondence, but we need a consensus code book before we proceed with detailed analysis. So, this is one example of how consensus code book was developed. Coding is basically an interpretive process in which conceptual labels are given to the data. Some data I have been conceptualized well this is all under fear, this is all under shame.

So, this is how the interpreter conceptualizes and that has to be common across centers. Codes are words or devices for identifying themes and that is how they should be used. Overall quality assurance should include data analysis plan with a consensus approach. So, when you are thinking of quality assurance of the data have this plan ready to maximize intercoder reliability in coding open ended data. So, this is something which we need to remember, we need to do and we need to ensure through close supervision.

Multicentric studies also present methodological challenges and the as local contexts differ and they add to the complexity and opportunities for introducing confounding variables. Generalizability is another challenge. Extending the research findings from the study population to the population at large is not possible, because the size of the sample usually a small group of people or a small number of cases and the context is generally not representative of the large population. However, interventions may be applicable to other distinct populations and in which investigators based on what they learned transfer and apply. So, what I mean to

say is that you cannot say that the findings can be generalized, but once you have developed a promotion intervention based on those findings you can try to replicate or scale up those interventions in other parts and see whether they work or not.

So, these are the two types of coding which we use this basically the same process it can be inductive coding, where we actually go from theory to hypothesis to observation to confirmation. Best for the first round of analysis we do inductive coding and then having got the results of this we go again upwards. This is best for that is deductive coding that is best for subsequent rounds of analysis. Here you have the set of tags already processed it is a quicker process the second round is usually a quicker process this is just a check mechanism. Now, finally, what we are coming to is the use of social data as qualitative data, because now we are all familiar with the multitudes of sources of social data.

We also know that we are drowning in information and being bombarded with data through social media, but the beauty of it is that what people share on social media are rich deep unstructured stories told through images videos or text and that is what is qualitative data. So, when you think of social data as qualitative data it opens a new set of tools for analyzing it. Primary qualitative allows you to explore in depth social qualitative gives you the breadth. So, perhaps you understand that the this data is in thousands in hundreds of thousands which is easily available. So, more than in depth it gives you the breadth its value comes from the scale.

So, it is be able to see the behaviors of thousands of people and that gives you a more comprehensive picture. So, you can do a small primary qualitative and you can boost it up with a social qualitative if your topic and method allows. So, that you get both the depth and the breadth of data which is so very important in qualitative research. So, how do you apply qualitative methods to social? Grounded theory lends itself very well to analysis of social data. We have to just develop the right analytical tools we can do discourse analysis, we can do narrative analysis, we can do thematic analysis and in the same way you codify the data, quantify the data we have already talked about content analysis gives the frequencies and patterns gives the outline of a story then deep dive.

Once the picture has an outline start filling in the detail use thematic and narrative analysis techniques to find and understand the meaning in the data and then synthesize bring it together to complete the picture. And you would often find read a lot of newspaper stories and they follow the same method perhaps in a more elementary manner, but that is how we need to also build up our stories in public health. This is just a case study which I wanted to share is how the British Red Cross learnt to talk about loneliness. The question was the British Red Cross works to connect human crisis with human kindness and encourage resilient communities where people look after each other. As part of this it sought to raise public awareness of and understanding provide suitable services and influence policies concerning loneliness.

The approach which they took is that they felt loneliness is often hidden and rarely spoken about loud. There is a stigma about it and our understanding is shaped by dated stereotypes you know if I have children and still I am feeling lonely I do not go to people and say that well I am lonely they will say what are your children doing they will actually criticize my children criticize my family so people are stigmatized. Now our social media's veil of anonymity gives people a safe space and that is why you will now find that in all your media Facebook, WhatsApp there is so much of talking about people feeling alone of things which people are doing to overcome loneliness etcetera. So the scoping of this work was they started working to understand the nature of their challenge what they already knew what activities and strategies were already in place and what they had tried before. Then from a technical perspective they spent time working out what exactly they meant by loneliness.

So they could map this audience profile onto the social data. So they partnered with organizations and collected data used social listening partner the partner did all the social listening to find conversation among people dealing with loneliness. A common misconception about social data is that its people showing off or arguing, but the reality is its often much more reflective of actual life. It is because the beauty of it is that it has anonymity. Anonymity of online forums make people comfortable to share personal aspects of their lives and that is what they banked upon.

So they got very good results and from that evidence they had some very good policy recommendations and the programs have received some new impetus for working with people who are lonely. So to come to a conclusion qualitative research involves study in natural settings and interpreting phenomenon in terms of the meanings people bring to them that is the emic perspective. The process is more important and powerful here not the product we do not emphasize the numbers, but how what was happening to bring those numbers on. The process involves inductive reasoning to build up a plausible theory. The broad types of qualitative research include exploratory, descriptive and comparative.

There are many strengths and weaknesses of qualitative research as well. Major limitations are possible sample sizes, small sample sizes, potential bias in answers, bias of self-selection, the Hawthorne effect and potentially poor questions framed by the researchers. The challenges of qualitative research involve addressing these limitations, ensuring accuracy and consistency and managing tons of data. The multi-centric qualitative research studies they present a particular methodological challenge particularly because local context adds complexity and opportunities for introducing confounding variables and using social data for qualitative research should be used more and more now because it allows to explore the breadth its value comes from the scale to give a more comprehensive picture. These are the references which have been used for this session. Thank you very much.