## Research Methods in Health Promotion Dr. Sweety Suman Jha Dr. B.C. Roy Multi-Speciality Medical Research Centre, Indian Institute of Technology Kharagpur Week 07

## Lecture 35: Formulating an appropriate study tool(Qualitative data collection tools)

So, hello everyone now in this lecture we will discuss on Formulating an Appropriate Qualitative Data Collection Tools. So, here we will cover first that what are the different qualitative data collection types, then we will discuss regarding you know observation protocol for the observation method and then we will talk on the interview protocol. Now regarding the different qualitative data collection types you all know that we have observations. So, it can be you know a complete participant where participates you know the researchers you know the participation is complete the participant is you know in the sense that the researcher they have a complete participation in that particular group I mean during the observation that is why researcher cancels role and participates completely as participant. And complete observer here what happens the researcher they only observes without participating. Then interviews we can have a face to face you know one to one interviews in person interview we can have we can also have some telephonic interviews ok.

So, where the researcher interviews by phone with the participants and in fact, you know there were during COVID you know during pandemic due to lockdown and you know the various restrictions what happened there were some researchers qualitative researchers they went for the entire telephonic interviews ok. So, at that time it was not possible for one on one or in person interview. So, they conducted the entire interview by phone. Then we also know focus group discussion you know we have focus groups.

So, here researcher interviews participant in a group then email internet interview can also be done. Then apart from you know the observation and the interview in qualitative we have other data collection types or other data which is also important, but mostly what happened we always go for the interview and observation, but you can also involve some you know document some audio visual materials that can also be involved in your qualitative study. Now some public documents you can have minutes of meetings or newspapers you know you can have some information from all this documents and materials. Then the private documents like the journals the diaries or letters ok. Then we can have some audio visual digital materials also like photographs, the video recording, the video tapes, the art objects, the computer messages, some you know films you can have some sounds you can have you know.

So, it is not that we always have to think about the interview you know conducting interview and going for the observation technique. Any material which is actually you know will help you in basically exploring ok. We you know for qualitative we always talk about in depth understanding for exploring into more you know details you want to know something in more details we go for exploration through various qualitative techniques. So, in that case you know it might happen that some documents or some other audio visual digital materials can help you can aid in your you know the entire qualitative study. Because while ultimately you will have your findings now it is not always necessary that only the findings from interview and observations can help.

These are the materials which can also aid and which can also help in your qualitative study. So, first let discuss about observation protocol then we will discuss regarding the interview protocol ok. So, observation protocol we have to plan to develop and use the protocol for recording observation in a qualitative study. So, you should have a very proper in a prior planning. Now as I said as a researcher according to your rational of the study according to your aims and objectives you decide that you have a plan ok.

There you will be you will go for observation method for the qualitative study. Now you plan to develop and then you have you also have to develop a protocol so that you can use for recording observations while you will go for the observation technique in your qualitative study. Now researchers you know they often engage in multiple observations during the course of a qualitative study. So, as researcher or the you know researchers they often go for multiple observations during their entire course of the study and for that they use an observation protocol which they have to develop beforehand. So, that observation protocol why for recording information while observing.

So, you will be observing it may be participant observation or non participant observation, but the thing is that you have to record information whatever you see you have to record if you you know if you talk to them if you discuss with that particular community or group then also some things will come you know some views you know the views the community views the participant views and then everything you have to gather and you have to write you have to record all the information while you observe. Now this may be a single page with a dividing line. So, as it is mentioned you know that you can have a page and there you can have at the middle you can have a dividing line to separate the descriptive notes from reflexive notes. So, at one end you can have the descriptive note and the other column you can have the reflexive note. Now the descriptive notes in the sense that the portraits of the participants what do you see how you see reconstruction of dialogue then description of the physical setting where you observing then the particular event something is happening some people is doing something.

So, everything can be you know that particular events or activities. So, you should account you should basically record everything you should write it down. So, the accounts of a particular events activities you know the circumstances the situation and the other side what did I say that you we will be having the reflexive notes that is researchers personal thoughts you know the speculations that yeah during observation these things happen and I felt these were the issues some problems feelings a speculation ideas you know some impressions as a researcher as a qualitative researcher you have some impressions and prejudices. Now, also written on this form you can have some demographic information ok. So, that is also important where you are observing about the place about the time and date of the field setting when you are observing and where the observation is taking place.

So, that you know in short some demographic information should also be there. So, whenever as a researcher you plan to go for observation things should be very clear and in observation also you know what happens some semi structured unstructured issues are there. So, either you can have a something something some issues some particular you know event you want to record some activity you want to record. So, maybe 5 or 6 things you have mentioned. So, but while observing you can get some more things that you can write and sometimes it is almost unstructured where you know that this is the setting these are the group these are the people these are the situations, but it is not like you know prior you do not have the points that these all the things you know in a checklist form that these are the things I have to observe.

So, you can go in unstructured way and you can see whatever you see you can just note it down you can just write it down. Now, then we have the interview protocol we know we often go for the interviews for qualitative study. So, we have to plan and develop and use an interview protocol for asking questions recording answer during a qualitative interview. So, researcher and your research team you will be have you know your own aims and objectives and then you can plan for that what you are going to explore, what are the important things you know the central things, what are the important central phenomenon or things that you have decided or your entire research team members have decided that you will be going to explore. So, for that you have to discuss plan and you have to develop an interview protocol.

Now, the researchers they record information from interviews by making handwritten notes by audio taping or by video taping. Now, everything depend on your feasibility on your objective and also on the consent which you will be getting from the participants. So, researchers you know the record information it sometimes it happen you know the participants they will not give you consent for the audio taping and sometimes they will not give you for video taping, they will give you for audio taping, but they will not give you for video taping and you know they will give you for the hand yeah you can write it down you have you can have the handwritten issues I mean handwritten notes for the interview. So, researchers record information from interviews by making handwritten notes or by audio taping or by video taping it depends. Now, even if an interview is taped it is said that you know to be on safe side we recommend that researchers take notes in the event that when in the event if the recording equipment fails.

So, it is although you will see that there are some researchers they take the entire interview by audio taping and they write some very important and salient points in the field notebook. But generally it is recommended that you do not know when your equipment fails you know. So, in that case to be on safe side you can you know you should have the notes also and what happen you know if you have not taken the note in details in properly and your audio recorder or your you know recording equipment got you know it failed and sometimes it might happen again if you reaching that particular participant that particular participant you know might not agree he or she may not give you more time that here again you conduct another interview. So, you have to be very careful as a qualitative researcher everything you have to keep in mind. Now, if audio taping is used researchers need to plan in advance for the transcription of the tape.

So, these are the things which you have to keep in mind while you are thinking about the conducting interview and definitely in interview protocol you are planning these are the small, but important things that has to be kept in mind. Now, it is said that the interview protocol it can be about two pages in length there should be some space between the questions for the interviewer to write short notes and quotes in case the audio recording device does not work in future at that moment also it might happen. But you know what happens you definitely you should have some space between two questions in a protocol, but always you know you should also have the notebook ok. Then you know as a it is not always that you are just going as a single researcher you should have a note taker with you and that note taker should have a notebook and with you also you should have a field notebook where you can write some very very important and salient points. Even after that you can you should keep some space between the questions ok.

So, you can write something a short notes on you know the quotes. So, important quotes you can just write it down there. Now, the total number of questions it can be somewhere between 5 and 10 although no precise number can be given and it should be prepared in advance of the interview and use consist consistently in all the interviews like you know it is not that you will just go for one person interview you can you know sometimes you go and you follow theory of saturation and till data saturation you have to keep on doing the keep on conducting the interviews. So, the very first important thing is that you should be prepared in advance what are the questions that has to be prepared ok. That these are the things that I am going to ask I am going to keep in my content questions in my interview protocol.

See what I am trying to make you understand even after that during conducting the interview it might happen that you get something new, but related to that particular topic. So, you can that is why you know we always talk about semi structured. So, what happened you can add and you should add you must add those things you cannot just ignore because you are going for in depth understanding. Your aim is to explore in details you have your aim is to explore more. So, definitely you have to keep some content questions in advance of the interview and obviously, that particular protocol that particular questions should be used consistently among the other participants also ok.

According to your objective that you are till data saturation these are the few things which I am going to explore among the particular population or the particular participant. It can be school students you know it can be the tribal population the tribal adults depending on your

research I mean objectives. Now the interview protocol it should have different components ok. So, the components are some you know it should have some basic information about the interview, then the introduction the interview content questions with probes and the closing instructions. So, these are the different components which should be there in the interview protocol.

So, whenever you are planning you are you know trying to develop. So, these are the important things in our next slide in subsequent slides we will discuss each one. So, basic information now see the this is the part of the interview protocol where you have to write some basic information of the interview. So, that has not to be you know you cannot just ignore some basic information. So, that you can have a proper data you can have a proper database.

Now it should include time and date of the interview that is important when you are conducting that particular date time is important where the interview took place ok. So, in what setting in what area in what village block ok. So, that has to be mentioned then and the name of both the interviewer and interviewee. So, that is also important as an interviewee your name and the interviewee name ok. So, you will be you will develop one protocol when some basic points basic things should be there which I have to fill it up.

Project length of the interview means the total duration of the interview 40 minutes, 45 minutes, 1 hour could also be noted as well as the file name for the and also the you know as well as the file name for the digital copy of the audio recording and transcriptions. See it is always better now that if you have the complete you know these are the basic things, but that should never be ignored because that can be that is useful not it is not that can be useful these will be useful when you will sit with all the you know data and transcripts and everything when you will sit for the further analysis coding and analysis then you will see that these things are also important. So, the entire duration of the interview could also be noted and as well as the file name for the digital copy of the audio recording and transcriptions you know you can have 10 interviews or 10 digital copies. So, it is always better to mention. So, while you know transcription transcript generation and during coding and analysis you can have you will not have any problem.

So, everything will be there in your hand. Then after basic information we have you know introduction part. Now this introduction part it provides instruction to the interviewer. So, that useful information is not overlooked. So, that is very important you know mostly what happened in most of the researcher they feel very anxious.

So, what happened due to that anxiety some useful information might get ignored or might get overlooked. So, in introduction part you should mention you know you all the instructions to the interviewer should be there. The interviewer needs to introduce himself or herself you all know that is very important and to discuss the purpose of the study. Now that is very

important you should introduce yourself and what is the purpose of the study and what you can do you know most of the researchers what they do interviewer they write the purpose of the study under the introduction section. So, that can be done and that you can do you know because it is not always it is all it is not always possible that you will keep everything every word and every line in your mind.

So, in that case you can just write all those purpose of the study in your introduction section. So, that you can read it out in front of the participant interviewing. Now it should also contain a prompt to the interviewer to collect the signed copy of the informed consent form. So, you know you should not forget to collect the signed informed written consent form. So, in that case they should also be something should be mentioned a kind of reminded you can say.

So, prompt should be there then you know the general structure of the interview the important things should be there the how it will begin number of questions and the time that you should take that should be mentioned and obviously, you know that should also be declared in front of the participant that it will begin like this. These are the number of things that I am going to ask you and approximately at least you can say that here it will take 40 minutes 45 minutes or 1 hour approximately you can say that 45 to 1 45 minutes to 1 hour it will take because you have to explain the participant now otherwise after 10 to 15 minutes that participant might tell you that you did not inform me that will take 45 minutes. So, I will not continue with this interview anymore. So, then it will be a problem for you only as a researcher then asking the interview if he or she has any questions before beginning the interview after explaining everything you know you should again I mean you should ask just before beginning the interview before beginning the interview means before going to the questions ok. So, at least you should ask that if you have any query or questions related to this particular thing.

So, what happen we know that these things should be done, but these should be mentioned in your protocol otherwise you know as I said it often you know you forget overlooked or it you know these important things you know it get ignored. So, specially you know the researcher they are in anxiety that oh I have to conduct interview and these number of interviews. So, what happens out of anxiety you just forget some important things. So, that is why it is always advisable that you mention all these things in your interview protocol. So, that you do not forget and do not ignore it should not get overlooked.

Then you know opening question you just start with opening question an important first step in an interview is to set the interview at ease you have to make your opposite person a very comfortable ok. So, we typically begin with an ice breaker type of question ok. Here we ask the participants to talk about themselves the job role or something you feel that you know it is related to the topic, but that will make that particular interviewer participant comfortable ok. So, that depending on your topic you can put you can have an opening question ice breaker type of question, but yeah do not ask very personal questions at the beginning ok. So, that is very important because what will happen it will hinder I mean what will happen that particular person might not feel comfortable and you know after 2 or 5 minutes or 5 to 10 minutes he or she will say that no I have some work you know some excuses he or she will make that I would not be able to continue ok.

Because if a particular person is not comfortable now why he or she will give you time ok. So, that is important opening question depending on your you know research topic depending on what you are going to explore in your interview you can have an opening question ice breaker type of question to make that particular person at ease a very comfortable ok. So, that he or she continue with the entire interview you know with the entire duration of the interview then you will get into the contained questions. So, whatever points I am discussing everything should be written in the interview protocol. Now regarding the contained questions these questions are the research sub questions I mean you have you know research question, but to accomplish your goal you know to that answer that particular research question of your study you will have some important issue you can have some sub questions in the study.

Because you know these 6 to 8 questions I will ask then my you know the research question my main research question will be answered my goal and objectives will be fulfilled I will be able to accomplish my goal of conducting this particular study. So, asking about different facets of the central phenomena your central phenomenon could be you know the perceptions regarding the gender equity regarding you know some family planning practices or you can have you know different examples you can have you can for dietary habits or for you know the medication adherence in non communicable in a patient with non communicable disease. So, depending on your main central phenomenon you have different facets you know you can just divide into different questions. So, it is hoped that after the interview has answered all of the sub questions the qualitative researcher will have a good understanding as to how the central question has been answered ok. So, you have a central thing central question central you know phenomenon and to fulfill to understand that particular thing you have 5 6 or in 8 10 questions.

So, that is very important and it is you know hope that is why I have mentioned in my slide that it is hope that after the interviewee or the participant has answered all your sub questions all the 8 or 10 questions then at the end as a qualitative researcher you will be having a very very clear idea a very good understanding as to how the central question the central phenomenon has been answered. So, all these things you have to mention in your interview protocol. The using probes with question that is very important. So, you have to keep some probes with your content questions. Now, these content questions you know also need to include probes.

Now probes are the reminders of the researchers of two type to ask for more information to or to ask for an explanation of ideas ok. So, for that particular thing you can keep some you know probe and they act as a reminder just to remind that here if you aim to have more information related to that particular thing or to ask for an detailed explanation of that particular idea or particular topic. So, by using probes the researcher can even expand the duration of the interview as well as net useful information. Now, you will see there will be some participant who will not be willing to speak will not be willing to speak more. So, you will see that here in one line two line they are giving you answer and you will see that in 5 I mean 10 to 15 minutes only the interview is will be done.

So, the way he that particular participant is answering. So, it is quite obvious that within 10 minutes only the interview will be over and I will be as a researcher you will feel that I will be not be having you know the detail information the net useful information which I want ok. Because you are you know investing time and you have some aim in your you have some objective for your study and that you have to achieve. So, what happen you can keep some probe. If you after questioning if you see that a particular person you know speaking one line a two line and is not willing to speak more or is not willing to give you in details is not willing to answer your questions in details you can keep some probe tell me more or in that case what happened then.

And so, you can have you can use according to your content question and it also depends on the researcher I have seen that you know probes for the content question it depends on the researcher also the how actually he will try to explore more ok. What probe he or she will actually adopt so, that he or she can explore more he or she can have a very details understanding detail understanding of that particular question tell me more or in a more you know in a very comfortable you know very you can say that yeah so, do you think that these things exist in such a way. So, in that way what you can do you can keep some probe and you try to explore more ok. You want your participant to speak more and you get the useful information also and also the duration of the interview also get expands and definitely you keep on talking participants also keep on talking. So, definitely you will get some more information you know some more explanation of some information in details.

Then closing instruction is important it is not like just your questions are done and you will just move out from there and you will just say yeah it is done now you can go. So, this is actually not done. Now, closing instructions it is important to thank the interview that is very important initially you greet and then definitely you know you have to thank the interview for his or her time and respond to any final questions. If there any questions from both the side that can be answered and assure the interview of the confidentiality of the interview. See when you are taking consent when you are explaining the purpose of the study and when you are taking the written consent at that time definitely you are assuring the participant about the confidentiality, but it is also said while you close the interview.

Then at that point also you should assure the participant you should assure the interview of the confidentiality of the entire interview and ask if you can you know follow up with another interview if needed to clarify certain points. So, while analyzing if you see the certain points need to be clarified or in during interview only you found that one or two points need to clarify,

but today it is not possible. So, you can ask you know that particular participant that if we can sit for another day we can have you know you can if you can follow up with another interview if needed not always if needed to clarify certain points. And also one thing is important you know that particular participant not all, but some participant will ask you that what will be the final you know final result of this study I want to know. They are some participant you know they have such kind of curiosity to know in that case you have to tell them that yeah I will definitely send you the or will you can have some physical meeting also or you can send them the you know the some summary or the abstract of your research or study final summary or the final abstract that you can send if particular interviewee or participant ask you that I want to know the final result of this particular study then definitely you should do you should go for this.

Now, another important thing is whenever you are developing any you know the guide or protocol pre testing is important you should go for the pre testing. And regarding validity reliability it is not as similar to you know the quantitative tool for qualitative tool we focus or for the qualitative study for the entire study you know as validity in the qualitative it means that the accuracy of the findings ok. How much that finding is accurate for the entire study and as reliability you know it is said that the researcher approach qualitative researchers approach you know how much it is you know go along with the other researchers and also how you know it with other researchers and also with the other project topic. So, the important thing is that you have to go for the pre testing and the validity reliability is not as similar as for the quantitative thing.

So, that is important. So, here what happened we mostly focus on the accuracy of the findings and reliability we focus here on the consistency of the you know the approaches of the researcher the consistency of the approaches of the qualitative researcher with the other researchers and the with the other topic or with the other project topic. So, in conclusion researchers you know often engage in multiple observation we discussed during the course of a qualitative study and for that we need you know the observation protocol for recording information while we are observing. And the interview protocol it consists of several important components just now we discussed one by one in details. So, these are the basic information about the interview and introduction part the interview content questions with probes and the closing instructions. So, interview protocol these are all the components that you have to keep in mind.

And these are the learning resources just go through all the text books. Thank you.