

Research Methods in Health Promotion
Dr. Sweety Suman Jha
Dr. B.C. Roy Multi-Speciality Medical Research Centre,
Indian Institute of Technology Kharagpur
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Lecture 60: Report Writing: Qualitative and Mixed Methods research

So, hello everyone and this is the last lecture and this lecture is on the Report Writing of Qualitative and Mixed methods Research. Here we will cover on the report writing in qualitative research and report writing in the mixed method research. So, first we will talk about the report writing in qualitative study or qualitative research. Now here we have a checklist ok, checklist for reviewing the qualitative methods section of the project or study. So, to determine whether one has addressed important topics or not. So, these are you know the must to write issue or must to write topics you can say that you have to mention in your study or in your project.

So, you see the first thing is that are the basic characteristics of qualitative studies mentioned. So, that you have to mention it you have to keep in mind that what are the basic characteristics of qualitative studies mentioned or not. Then is the specific type of qualitative design to be used in the study mentioned ok. What kind of you know approach, what kind of qualitative approach or qualitative design you are actually going to have that should be mentioned.

Then the does the reader gain an understanding of the researchers role or reflexivity. You know the researchers role reflexivity his or her own reflection, his or her own past experiences, you know the past historical, social or the cultural experiences etcetera and how they may shape the interpretations because you are the one who are going to interpret. So, that should be mentioned. So, these are the things you have to write which approach you are going to have ok. The grounded theory one or the narrative of the case studies or the phenomenology that should be mentioned, the characteristics of those should be mentioned.

Then the purposeful sampling strategy for sites and individuals identified or not. Then clear recruitment strategy for enrolling the participants is that mentioned or not. Then the are the specific forms of data collection mentioned and the rationale given or not. Like if you are going for observation qualitative observation or if you are choosing an interview or if you are choosing focus group discussion. So, that should be mentioned with a proper rationality.

Then are the procedures for recording information during the data collection detailed like you know we discussed about the interview protocol, we discussed about the observation protocol. So, whether all those things of the data collection phase are detailed and mentioned or not. Then data analysis steps how you are going to analyze the data it is mentioned identified or not. Is there evidence that the researcher has organized the data for analysis, then data

organization first you have to go for the data organization then only you can go for the analysis. Then has the researcher review the data generally to obtain a sense of information you know once or twice or thrice you have to go through all the data to have an to have a general understanding to have a general idea.

Then are the ways that the data will be represented mentioned or not how actually you are going to represent in tabular form, in pictorial form you know graphs figures has the researcher coded the data have the codes been developed to form a description and to identify the themes. So, using those codes and to develop themes and descriptions then are the themes interrelated to show a higher level of analysis and abstraction. So, the interrelation of different themes. So, you can have you know some more complex analysis and interpretations have the basis for interpreting the analysis been specified this is also important based on the personal experiences or on the relevant literatures or the research questions. Has the researcher mentioned the outcome of the study what actually is the outcome of that particular study and developed a new theory you know theoretical model or provided a framework or a complex picture of themes.

Then have multiple strategies been cited for validating the findings or for the accuracy of findings what are the different methods that you know have been adopted. Now, writing the qualitative report you see a plan for qualitative method should end with some comments about the narrative right that will emerge from the data analysis the findings will come and it will have some comments about that narrative. So, in a plan for a study consider advancing several points about the narrative. So, what are the points the important points? So, the important points are the basic procedure in reporting the results of a qualitative study are to develop descriptions and themes from the data. And to present those descriptions and themes which convey multiple perspectives from the participants and the detailed descriptions of the setting or individuals.

So, from the participants experiences the themes and descriptions you know and then their own perspectives you know you have to understand in the you have to find it from the perspectives from the participants ok. Then a detailed descriptions of the participants the individuals the settings the events should be kept in mind. Then using a qualitative strategy of enquiry these results may also provide a chronological narrative of an individuals life. Like in narrative research if you go and ask somebody you know in a story format you will just keep on saying you know his own experiences of his life of a particular topic or for 5 to 10 years his own experiences in a story format. So, that is a narrative approach or a detailed description of their experiences of that particular event or phenomenon how a person how a participant experience that particular circumstances that particular events or phenomenon or the theory generated from the data you know theory which is actually grounded in the data data from the participants.

So, grounded in the participants views also it can also be said grounded in the participants views. A detailed portrait of a culture sharing group you know ethnography we focus on the cultural factors and cultural issues of a particular group or a community or an in depth analysis of one or more cases in case study or in case studies. Now given these different strategies the findings and interpretation sections of a plan for a study it might also discuss how the sections will be presented. As just a you know in objective accounts as you have prepared your research objectives or some field work experiences you can you know in just keep you can represent the field work experiences in a chronology format a process a theoretical model or a process model as in grounded theory we go an extended story narrative approach analysis by cases or across different cases or a detailed descriptive portrait. So, all the findings and interpretation sections it can also you know discuss that how the different sections will be presented.

Now the at the specific level there might be some inclusion about writing strategies that will be used to convey the qualitative research. Some dialogues some quotes we can put ok, then apart from this how actually you are going to represent in pictorial format in graph in figure or in tabular format ok. So, these are the things about that you have to keep in mind you can include you know these strategies you can keep. Now for qualitative research we have some you know guidelines reporting guidelines and under these reporting guidelines we have you can see the different points ok. You can also you know say that this is kind of checklist.

So, SRQR that is standards for reporting qualitative research ok. So, we have SRQR that is standards for reporting qualitative research and COREC. So, COREC I will discuss in my next few slides. So, SRQR is for any qualitative research you can use it ok, but for COREC it is said that it mostly you know it focus on the interviews and focus group discussion, but SRQR is a standard for reporting qualitative research any qualitative research you can use a standard. Now in most of the you know article or literature you will find that they have used COREC.

So, COREC is one which is used most widely. Another important reason for this is that for qualitative now we mostly go for interviews or I mean the in depth interviews or focus group discussion that is why it may be that we find COREC more in the literatures, but we can use SRQR. Now, SRQR or standards for reporting qualitative research you see there are different points different domain you can say the title and abstracts. So, the title you know there should be a very concise description of the nature and topic of the study, identifying the study as qualitative and indicating the approach. As I was just saying in my you know first slide also that what qualitative approach ethnography, grounded theory, narrative etcetera, phenomenology or you also data collection methods is recommended in the title.

Abstract you all know background purpose, result and conclusion you have to put. So, next is the introduction section in your you know study in your report in your article. So, here in the another introduction you have to first mention about the problem formulation, what is the problem statement significance of the problem, then purpose of the research question. So, purpose of the study and specific objectives or the specific research questions that you have to

remember. Then on the methods qualitative approach and research paradigm different approach we have mentioned apart from that any theory if applicable and if appropriate and if as research you want to add and the rationale of using that particular approach or that theory.

Then you know researcher characteristics and reflexivity. So, you all know the researcher characteristics, his or her own past experiences, his or her own inputs and experience, views, assumptions should be there ok. Then context and that is setting a site and salient contextual factors and the rationale of adopting this. Then the sampling strategy how and how you are going to select and why research participant documents events were selected and how they were selected criteria for deciding. So, rationale here also why you are you know considering all this when this participant this population and for sampling saturation definitely that when no further sampling was necessary.

So, this is also you have to mention if in your study it is needed. Then ethical issues definitely ethical issues pertaining to human subjects documentation of approval by appropriate ethics review board you know that you should have you know I mean the ethics board you know the IRB or the ethics board they should provide you that yeah you can conduct this study and approval is required. And the consent ok, participant consent now consent you know the written informed consent for basically involving in that particular study. Now, in qualitative you also have to remember that for interviews or focus group discussion you also have to take consent for audio recording for video recording. So, everything you have to remember.

So, it is not that you will not take consent for audio or video recording just for the for interview and for writing the text you know taking notes you will just for taking notes you will take consent. You also have to take notes I mean you also have to take consent for the note taking for the audio taping and for the video taping or any kind of materials you know take from them any kind of information that should be you know I mean a proper consent should be there. And ethical issues you have to keep in mind other confidentiality and data security issues you have to explain to the participant. Then data collection methods so, you have to be very clear what kind of data you are going to collect as appropriate you feel. Then the analysis what triangulation of sources or what methods you are going to have or any modification or procedures.

So, all the rationale you have to mention that why you are going for that particular data collection methods. Then the instruments and technology interview guide or questionnaire audio recorder everything you have to keep in mind. Then the number and relevant characteristics of participants documents, level of participation, then data processing, coding you know the coding entry. Then analysis the process by which inferences theme etcetera were identified and developed involved including the researchers involved in data analysis ok. How you know how many coders or how many researchers were involved in data analysis ok.

Then techniques to enhance trustworthiness you know the credibility or the accuracy of findings you can go for member checking or triangulation. So, these are the things you have to keep in mind according to this a guideline SRQR. Then results and findings, synthesis and interpretation what are the main findings you have to mention. Then the evidence, then in the discussion section the integration part short summary of main findings, the explanation of how findings and conclusions connect to, support elaborate everything you have to mention and limitations that yeah what are the limitations of findings that also as a researcher you should mention your reporter article. And others the conflict of interest we all know as a researcher we have to keep in mind if any conflict of interest is there any source of funding that also should be mentioned in external source of funding should be mentioned.

Next is for qualitative research we have COREC that is consolidated criteria for reporting qualitative research. Now, here we have 3 domains ok. So, domain 1 is regarding the research team and reflexivity. So, regarding research team and reflexivity we have personal characteristics. So, personal characteristics of an interviewer or the facilitator of focus group discussion he is a credentials, occupation, gender, experience and training.

And see these are you know just example that which author, authors conducted the interview, such as credential, occupation, gender everything is mentioned here. Then relationship with participants. So, relationships established was a relationship established prior to study commencement or the participant knowledge of the interviewer ok. So, what did the participants know about the researcher or the interviewer, the interviewer characteristics. So, what characteristics were reported about the interviewer or facilitator.

So, in this particular guideline under domain 1 we have personal characteristics and relationship with the participants. The next domain we have the study design. So, in study design see the theoretical framework, methodological orientation and theory what methodological orientation was stated to underpin the study. As you know we have discussed you know number of times the grounded theory or discourse analysis ethnography content or phenomenology. Apart from theoretical framework we should be you know careful over the participant selection, the sampling, the method of approach, how were participants approached ok.

The sample size see everything is mentioned here. So, the sample size then non participation how many people refused to participate or dropped out and why. Then setting, setting of data collection where was the data collected you know setting of the research is important whether it was in community, in clinic, home, workplace, presence of non participants was anyone else present beside the participants and researchers. Description of the sample what are the important characteristics of the sample, the socio demographic data. Then related to data collection the interview guide ok.

Repeat interviews where repeat interviews carried out and if years and how many audio visual recording if you have taken ok. If the researcher you know has used audio visual recording the field notes then so where field notes may during and or after the interviewer focus group the duration. So, what was the duration you know of the interviewer focus group was data saturation discussed and transcripts return where transcripts return to participants were come and under any corrections. Domain 3 is about analysis and the findings. So, in analysis you see the number of data coders how many data coders coded the data description of the coding tree.

So, did authors provide a description of the coding tree, coding tree is all about that how you are going to proceed with the coding ok. It is just in a you know in a tree format or in a different you know in a pictorial format you will find that you can develop a coding tree how to proceed with the coding. Derivation of themes from the code if software if applicable or if researcher has used participant checking the participant provide feedback on the findings. Then after analysis we have the reporting the quotations presented. So, where participant quotation presented to illustrate the themes or findings then was each quotation identified either with participant number with some description of the participant.

So, you have to support your theme by some quotes or the quotations. Then data and findings consistent was a consistency between the data presented and the findings. There should be clarity of the major and minor themes where major themes clearly presented in the findings or is there description of diverse cases or discussion of minor themes. So, these are the three important domains under corex that is consolidated criteria for reporting qualitative research. Now for the mixed method research the specific mixed method components and the design components of a mixed method reporter article are first see the title needs to reflect the fact that this is a mixed method study and incorporate such term as mixed method research.

So, in title you have to keep in mind that there is a reflection or the term mixed method research study has been used. Now in the introduction the introduction can note a deficiency in previous studies that points to a need for collecting both quantitative and qualitative research. So, what are the gaps? The important crux is that what are the gaps and what is the need that we have to go for the mixed method that is we have to opt both for quantitative and qualitative. It can also include a purpose statement and quantitative qualitative and mixed method research question. Your purpose of study, aim of study and definitely as I have discussed in my previous lectures also that quantitative qualitative and mixed method research question should be mentioned properly.

You know there should be rationality that why actually you are going for the mixed method study. The method section can open with a statement about mixed method research and the type of design used in the study which mixed method design actually you are going to have. Then you know there is reasons for using that type of design and examples of other studies that have used it. So, like if you have you know opted for convergence then why did you opted for

the convergence design and also along with that you can have some examples of other literatures which have used that particular convergent design and you can incorporate all that into this section. Now, both quantitative and qualitative data collection analysis procedure should be mentioned in addition to the integration procedures.

So, how quantitative data collection analysis will be done, how qualitative data collection and analysis will be done and also how you are going to do the integration that also should be mentioned in your report or in your study under the method section. Now, in the result section you see it is in the result section that mixed methods article vary in structure, but knowing the type of mixed method design helps a writer to understand the different structures. So, basically in mixed method you know the result section you know for the convergent design for the explanatory sequential for the exploratory or for the embedded we can have different a way of you know reporting the results different way of representing. So, here the important thing is that type of mixed method design if it is clear it helps a writer to also understand the different structures. Like in a convergent design the result section might report the separate analysis reports from both the quantitative and qualitative data or what happened or it might happen that it might report the results of both types of data analysis plus the results of the mixed method merged analysis after you have merged your databases.

When the later option is chosen the researcher may presents either join display they relate the themes to the quantitative variables. Basically when merging you often you know feel and you have the interpretation you directly go to join display which is much more helpful. Sometimes you know what happen we do separate analysis and we write the interpretation or integration in a paragraph format also. So, like you know in week 11 I discussed that you can have the quantitative data then you can have the qualitative findings and at the end you can have that yeah what are the integration ok. Then when the this is done now in a sequential design the results for the first phase are reported followed by the results of the connection procedures followed.

So, and then followed by the results of the final phase and any steps taken to connect and interpret the results. Join displays here also it can be helpful to include for sequential design as well. So, you know in week 11 we discussed how can we represent, how can we interpret the thing is that these are the important things that should be mentioned in your article in your study on your report. Now then in the discussion section we find the interpretation of the results as well as a discussion relating this interpretation to the literature. We often you know relate our findings you know in the discussion section with the relevant studies with the relevant existing literatures.

We also find an accounting of the limitations of the study and how the results might inform the future research. So, how this result you know in discussion you can just write it down that how what are the limitations of this study and how the findings or the result can give a new scope for further research or might inform future research. Then in a convergent design the

interpretation may reflect the merging of the data and the authors will compare the findings from the quantitative and qualitative analysis in order to answer the mixed method research question. So, you know you have to discuss as a researcher your own interpretation should be there. So, the interpretation it should reflect that merging the two databases and you will compare the findings the similar and dissimilar findings.

And finally, you have the final interpretation of actually answering your mixed method research question. In explanatory and exploratory sequential the interpretation often mirrors the sequence of the data collection analysis you know then the researcher reports on the conclusion drawn from answering the mixed method question. So, be it for explanatory sequential or be it for exploratory you know that what is the importance of you know having two data in like for example, in explanatory we are using qualitative to explain some quantitative findings. And finally, you have your interpretation you report you write down all those things you know as a researcher you report those findings your own interpretation your conclusion drawn from that particular you know design from analysis which actually answers your mixed method research question. Then in mixed methods intervention design the focus in the interpretation of the major findings relate to the primary data set, but the author also needs to comment on how the mixed method question was answered.

So, what happens in mixed method we know that there is a quantitative that intervention trial is the primary thing and qualitative is the secondary data which actually enhances support the entire intervention trial or the experimental trial. So, the focus in the interpretation is that here you have to understand that definitely you are focusing on the major you know quantitative the trial findings major findings which is related to primary data set that is a quantitative the intervention trial. But here you should also comment that what was the use of the qualitative data the how did you embed and everything what is the final interpretation and at the end your own you know the mixed method question will be answered. Now, this is Graham's guideline this is you know good reporting of a mixed method study this is guideline for reporting of mixed method study or article. Now, here you see the guidelines the 6 ok, the 6 important points you can say the first is the describe the justification for using a mixed method approach to the research question many times you know number of times we have discussed this issue and this is nothing when you will write your article.

So, when you will report it through Graham's guideline then you have to mention the section which section of your article or what is the page number which actually fulfilled this particular issue this particular criteria. Then describe the design in terms of the purpose priority and sequence of methods this you have to describe. Then describe each method in terms of sampling how what was sampling strategy the data collection analysis then the next is describe where integration has occurred how it has occurred and who has participated in it you know in terms of the researchers. Now describe any limitation of one method which is associated with the present of the other method that you have to write then any insights or you know in that information which is gained from mixing or integrating methods. So, these are the 6

important guideline or points you can see that you can use in your mixed methods study that is Graham's guideline.

So, let us conclude now the basic procedure in reporting the results of a qualitative study are to develop description and themes from the data to present these description and themes that convey multiple perspectives from participant and detailed descriptions of the setting or individual we have discussed this. And you know in the mixed method in the results section you know it varies articles vary in structure, but knowing which type of mixed method design will help the writer to understand the different structure. So, in mixed methods as I said Graham's guideline you have to remember some important things which we discussed that is very important you have to remember while writing any article or in a study you have to keep in mind ethical issues. What are the different ethical considerations ethical issues and that has to be considered in any type of research which consider human participants. So, these are the learning resources just go through all the resources. Thank you so much.