Challenges in conducting qualitative research in health: A conceptual paper

Hamidreza Khankeh1, Maryam Ranjbar2, Davoud Khorasani-Zavareh1, Ali Zargham-Boroujeni4, Eva Johansson5

ABSTRACT
Background: Qualitative research focuses on social world and provides the tools to study health phenomena from the perspective of those experiencing them. Identifying the problem, forming the question, and selecting an appropriate methodology and design are some of the initial challenges that researchers encounter in the early stages of any research project. These problems are particularly common for novices.

Materials and Methods: This article describes the practical challenges of using qualitative inquiry in the field of health and the challenges of performing an interpretive research based on professional experience as a qualitative researcher and on available literature.

Results: One of the main topics discussed is the nature of qualitative research, its inherent challenges, and how to overcome them. Some of those highlighted here include: identification of the research problem, formation of the research question/aim, and selecting an appropriate methodology and research design, which are the main concerns of qualitative researchers and need to be handled properly. Insights from real-life experiences in conducting qualitative research in health reveal these issues.

Conclusions: The paper provides personal comments on the experiences of a researcher in conducting pure qualitative research in the field of health. It offers insights into the practical difficulties encountered when performing qualitative studies and offers solutions and alternatives applied by these authors, which may be of use to others.

Key words: Methodological challenges, qualitative research, research methods

INTRODUCTION

Health services and health policy research can be based on qualitative research methods, especially when they deal with a rapid change and develop a more fully integrated theory base and research agenda. However, the field must be with the best traditions and techniques of qualitative methods and should distinguish

the essentiality of special training and experience in applying these methods.[1]

Qualitative research methodologies could help improve our understanding of health-related phenomena. Health knowledge must also include interpretive action to maintain scientific quality when research methods are applied. Qualitative and quantitative strategies should be seen as complementary rather than being thought of as incompatible. Although the procedures of interpreting texts are different from those of statistical analysis, due to their different type of data and questions to be answered, the underlying scientific principles are very much the same.[2]

While working for more than a decade as qualitative designer, Khankeh faced a lot of challenges in conducting qualitative research in the field of health which occupied
the mind of other health researchers. Therefore, this article contributes to the discussion of challenges related to qualitative research in healthcare in the light of personal experiences of a researcher conducting purely qualitative health research.

**A MAIN ISSUE FOR THE QUALITATIVE RESEARCHER**

Qualitative research methods involve systematic collection, organizing, and interpretation of material in textual form derived from talk or observations. They are useful to explore the meanings of social phenomena as experienced by individuals in their natural context. The health community still looks at qualitative research with skepticism and accuses it for the subjective nature and absence of facts. Scientific standards, criteria and checklists do exist and the adequacy of guidelines has been vigorously debated within this cross-disciplinary field.

Clinical knowledge consists of interpretive action and interaction – factors that involve communication, shared opinions, and experiences. The current quantitative research methods indicate a confined access to clinical knowledge, since they insert only the questions and phenomena that can be controlled, measured, and are countable where it is necessary to investigate, share and contest the tacit knowledge of an experienced practitioner. Qualitative research focuses on the people’s social world, and not their disease. It is concerned with increased understanding of the meaning of certain conditions for health professionals and patients, and how their relationships are built in a particular social context. These kinds of research allow exploration of the social events as experienced by individuals in their natural context. Qualitative inquiry could contribute to a broader understanding of health science considering the substantial congruence between the core elements of health practice and the principles underpinning qualitative research. The globalization progress augments the necessity of qualitative research.

Corbin (2008) reported that in the past 10 years, the interest in qualitative methods in general and grounded theory in particular has burgeoned according to a review of the literature and dissertation abstracts.

A researcher engaged in qualitative research will be confronted with a number of challenges. Identifying the research problem and forming the research question are some of the initial challenges that researchers encounter in the early stages of a qualitative research project. Researchers and students sometimes fail to understand that adopting a qualitative approach is only the first stage in the process of selecting an appropriate research methodology.

Once the initial research question has been identified, the crucial decision to be made is on the selection of an appropriate method, such as content analysis, ethnography, or grounded theory, and selecting the research design as well. Subsequent arrangements would be on the proper methods of data collection, participants, and the research setting, according to the methodology and the research question. Qualitative researchers should also handle other important concerns such as data analysis, ethical issues, and rigor methods of results.

In this paper, we are going to discuss important practical challenges of qualitative inquiry in health and the challenges faced by researchers using interpretive research methodologies.

**UNDERSTANDING THE REAL NATURE OF QUALITATIVE RESEARCH AND ITS CHALLENGES**

It is important to provide an honest and concise appreciation of the essential characteristics of the qualitative research before discussing the challenges of the interpretive research approach to studies in health.

**Virtues of qualitative research**

Qualitative research does not promise a clear or direct and orderly method of tackling research problems in health studies. It does not provide researchers with a set of rules to be followed or give them a comforting sense of security and safety backup against possible mistakes on the road to knowledge. This research method depends on the “power of words and images,” but does not offer the assimilated meanings such as numbers and equations; it is rather “an attentive search of meaning and understanding” and an attempt for profound comprehension and awareness of the problems and phenomena. The essentially “diagnostic and exploratory nature” of qualitative research is invaluable in developing conceptualizations in health as an evolving discipline. It tenders the possible tap into the sea of complex interactions in health that can be as follows.

Researchers launch the quest for new theories in health which should acknowledge that “qualitative research is an approach rather than a particular set of techniques, and its appropriateness derives from the nature of the social phenomena to be explored.” In qualitative research, knowledge derives from the context-specific perspective on the experienced phenomena, interpretations, and explanation of social experiences.

**Why qualitative research in the health professions?**

Researcher should justify the reason for which he or she selected qualitative research. Qualitative researchers pursue...
a holistic and exclusive perspective. The approach is helpful in understanding human experiences, which is important for health professionals who focus on caring, communication, and interaction.\[10] Many potential researchers intend to find the answer to the questions about a problem or a major issue in clinical practice or quantitative research can not verify them.

In fact, they choose qualitative research for some significant reasons:

- The emotions, perceptions, and actions of people who suffer from a medical condition can be understood by qualitative research.
- The meanings of health professions will only be uncovered through observing the interactions of professionals with clients and interviewing about their experience. This is also applicable to the students destined for the healthcare field.
- Qualitative research is individualized; hence, researchers consider the participants as whole human beings, not as a bunch of physical compartments.
- Observation and asking people are the only ways to understand the causes of particular behaviors. Therefore, this type of research can develop health or education policies; policies for altering health behavior can only be effective if the behavior’s basis is clearly understood.\[10,11]

Before adhering to a distinct research methodology, researchers have to exactly understand the nature and character of their inquiries and the knowledge they choose to create. The majority of health researchers face many loopholes in justification. However, all defects and challenges of qualitative research should be realized rather than discarded as a compelling way to knowledge structure. New endeavors in excellent academic achievement and building new tradition of qualitative research in health can be facilitated through acknowledging traps and clarifying the real practical challenges.\[9]

Finally, qualitative research provides investigators with the tools to study the health phenomena from the perspective of those experiencing them. This approach is especially applied in situations that have not been previously studied, where major gaps exist in research field, and when there is a need for a new perspective to be identified for the arena of health care intervention.\[6]

Based on corbin and Strauss (2008), “Committed qualitative researchers lean toward qualitative work because they are drawn to the fluid, evolving, and dynamic nature of this approach in contrast to the more rigid and structured format of quantitative methods. Qualitative researchers enjoy serendipity and discovery. It is the endless possibilities to learn more about people that qualitative researchers resonate to. It is not distance that qualitative researchers want between themselves and their participants, but the opportunity to connect with them at a human level (Epistemology). Qualitative researchers have a natural curiosity that leads them to study worlds that interest them and that they otherwise might not have access to. Furthermore, qualitative researchers enjoy playing with words, making order out of seeming disorder, and thinking in terms of complex relationships. For them, doing qualitative research is a challenge that brings the whole self into the process.”

Choosing an approach for health research

Researchers select approaches and methodology based on some scientific logics, not on being easy or interesting. The nature and type of the research question or problem; the researcher’s epistemological stance, capabilities, knowledge, skills, and training; and the resources available for the research project are the criteria upon which adopting methodology and procedures depend.\[6,10]

Inconsistency between research question and methodology, insufficient methodological knowledge, and lack of attention on philosophical underpinning of qualitative methodology can be mentioned as some important challenges here.

There are several different ways of qualitative research and researchers will have to select between various approaches. The qualitative research is based on the theoretical and philosophical assumptions that researchers try to understand. Then, the research methodology and process should be chosen to be consistent with these basic assumptions and the research question as well.\[10]

Some researchers believe that there is no need to study the methodology and methods before beginning the research. Many researchers neglect to gain this knowledge because they are not aware of the qualitative inquiry complexities which make them go wrong. For instance, lack of information about interview, qualitative data analysis, or sampling is very common.\[10]

My experience shows that lack of knowledge, experience, and skills in a research team to do qualitative research can hinder the formation of original knowledge and improvement in understanding the phenomenon under study. The result of such a study will not be new and interesting, and even the study process will be very mechanical without good interpretation or enough exploration. Sometimes there is an inconsistency between research question, research methodology, and basic philosophical assumptions, and the researchers fail to justify their methods of choice in line with the research question and the ontological and epidemiological assumptions.
Finally, the researcher’s intentions, the aims of the research question/inquiry, and the chosen approach are regarded as the most important reasons to select a qualitative research method consistent with them and their underpinning philosophical assumptions as well.\[^6,10\]

**Research question and aim**

Qualitative research is exciting because it asks questions about people’s everyday lives and experiences. A qualitative researcher will have the chance of discovering the “significant truths” in the lives of people. That is a wonderful privilege, but you need to get those questions right if you dig into people’s lives and ask about their real experiences. An adequate and explicit research question, or a set of interrelated questions, builds the basis for a good research. But excellent research questions are not easy to write at all. A good research requires a good research question as well because it allows us to identify what we really want to know. However, at the beginning of a project, researchers may be uncertain about what exactly they intend to know, so vague questions can lead to an unfocused project.

Common problems coming up with a research question include:

- Deciding about the research area among a range of issues that are heeded in your field of interest
- Not capable of pointing toward any interesting area or topic sufficient to focus a major piece of work on
- Knowing about the area you want to concentrate on (e.g. emergency), but not a certain topic
- Knowing what area and topic is specifically difficult to articulate a clear question.

*Just make sure that you give serious consideration to the chosen area as the basis of your research and that a qualitative project is relevant and possible.*

Having identified a research area, your next step will be to identify a topic within that interesting area. Research questions should be derived from the literature. The research question can come from the list of “suggestions for future work” at the end of a paper you have found interesting. Moreover, you can search for some verifiable gaps through literature review, or based on your personal or professional experience and expert opinion, which should be studied. Therefore, all the previous studies that have already been conducted in the area are considered as important. In this way, you do not run the risk of asking a research question that has already been addressed and/or answered. Based on my experience, novice researchers have some problems finding the right topics in their field of interest because they do not perform a broad literature review to find the gaps and problems suitable to be investigated. Sometimes their field of interest is different from that of their supervisors or there are no experts to help them in this regard.

Although the topic may retain your interest and you may be committed to undertake such a study, it is important to recognize that some topics of personal relevance may also be deeply significant and difficult to research. Finally you need to make sure that your topic of interest is the one that you can actually study within the project constraints such as time and fund.\[^12\]

Once you have identified your interesting topic for research (according to a broad literature review, personal and professional experience, and/or expert opinion), you can begin to create a research question.

Forming the research question is one of the initial challenges that researchers encounter in the early stages of a research project. Therefore, it acquires significance by the very fact that it provides brief, but nevertheless, important information on the research topic that allows the reader to decide if the topic is relevant, researchable, and a remarkable issue. Furthermore, the research question in qualitative studies has an additional significance as it determines the manner of conducting the study.

The qualitative research question delineates the procedures that are executed in the study and provides a map to the readers by which they can trail the researcher’s intentions and actions in the study. Therefore, special attention is needed on how a qualitative research question will specifically be structured, organized, and formed in the way to quote the necessary information and elements that allow the readers to assess and evaluate the study.

The formation of a qualitative research question acquires a basic conducting role for the study and a fundamental function to develop an audit trail that can empower the readers to judge the value, rigor, and validity of the whole research project. Hence, researchers should not only pay special attention toward developing a significant and relevant question, but also formulate it properly. The qualitative research question must be provided in such a way as to impart, reflect, and conjoin the theoretical and abstract assumptions with the practical and pragmatic means of attaining them.

In plain words, a good qualitative research question implicates particular phrasing, whereas the order of words should make the topic of interest amenable to the qualitative quest.

The researcher has to concentrate on how the content of the research topic is understood when phrasing the qualitative research questions, adhering to the topic with the philosophical/theoretical suggestions and to the structure.
of the study which requires compounding specific principal elements.

The content of a good qualitative research question takes the form of a declarative rather than an interrogative statement

Also, the content provides a brief focus on the issue to be investigated, but does not define the exact relationship of the variables to make these relationships flexible in emanating from the study according to the qualitative research theory. The qualitative research question incepts necessarily with an active verb like understanding, exploring, interpreting, constructing, explaining, describing, etc., to reflect the paradigm/philosophy underpinning the qualitative study. Consequently, specific nouns that represent the aims of qualitative studies, such as experiences, feelings, views, perspectives, knowledge, etc., should be applied. Finally, the methodology or method should appear in the qualitative research question coherent with them. Meanwhile, the structure of a good qualitative research question will address five of the following six: who, when, where, what, how, and why, and the entire research question should devise the sixth element.[13]

For instance, “Exploring the experiences of self-immolated women regarding their motives for attempting suicide: A qualitative content analysis study in Kermanshah Iran”

Make sure that your research question is consistent with the approach you are adopting. It is like an easy trap if you decide about the research question before considering the proper way by which you are intending to make assumptions and analyze your data.

My experiences show that novice researchers formulate their research question without considering the approach of their study in a proper way and usually their research questions are very broad, unclear, and vague. Since the intention of their studies is not completely clear at the beginning, they cannot decide about the research approach; also, they have to change their research question and take different directions in the course of study or they will end up without adequate results that can help readers or consumers improve their understanding or solve the problem.

Although a researcher initiates a study with a general question and topic, the interesting aspect of qualitative research is that the questions, which are more specific and can help in further data collection and analysis, arise during the course of the study. Thus, a qualitative research question can be broadly, rather than narrowly, focused in the beginning. Researcher can try to refine and make it more focused later. This is why qualitative research is usually cyclic rather than linear. Qualitative research is cyclic, which means that the research question in this approach immerses gradually into the topic. It means that when you come to know more and more about your topic, your ideas develop about what to focus, either through reading, thinking about what you have read, or in early stages of data analysis. Finally, it is literature review, general reading, and discussion with an expert supervisor that can help you find the right topic. If the background knowledge is poor at the beginning of the study, broad but clear research question can be reasonable. Research question may become more focused or develop in a different direction according to more reading and/or preliminary data analysis. A clear and focused research question is articulated and used to conduct further analysis and any future literature reviews necessary for the final write-up.

However, it is very important to take time to choose a research question, because it can be a very challenging exercise. Actually, the ultimate success of the project depends on selecting a clear and convenient question. The question should be appropriate for the qualitative research and for the specific approach you choose which must be grounded in research. It must ask precisely what you want to find out and be articulated and clear. Knowing this will help you plan your project.[12]

Choosing the right methodology and research design

Crucial decisions need to be made about an appropriate methodology, such as ethnography or grounded theory, after identifying the initial research question. The main concern of novice researchers is to find the reason and appropriate design to do the research, and proper methodology to answer the question. Researchers ought to figure out about the planning of qualitative research and how to choose the methodology.

Researchers sometimes fail to understand that in the process of selecting an adequate research methodology, adopting a qualitative approach is only the first stage. Students, and sometimes researchers, choose qualitative research because they think it is easier to use than the other methodologies. But this reasoning is fumble since qualitative research is a complex methodology where data collection and analysis can be mostly challenging. Sometimes lack of planning and inadequate attention paid to the properness of the selected approach considering the purpose of research will be problematic.

For new qualitative researchers, it often seems that the researcher should totally concentrate on the dual process of data collection and data analysis. It is very important to consider thorough planning in all stages of the research process, from developing the question to the final write-up of the findings for publication.[6]
The research design and methodology must be adequate to address the selected topics and the research question. Researchers have to identify, describe, and justify the methodology they chose, besides the strategies and procedures involved. So, it is pivotal to find the proper method for the research question. It should be noticed that some of the details of a qualitative research project cannot be ascertained in advance and may be specified as they arise during the research process. An important problem for novice researchers is the little acknowledgement of different approaches that address different kinds and levels of questions and take a different stance on the kind of phenomena which is focused upon. More discussion and debates are necessary before selecting and justifying an approach.

The need for consistency and coherence becomes more obvious when we consider the risk of something called “method-slurring.” This is the problem of blurring distinctions between qualitative approaches. Each approach has to demonstrate its consistency to its foundations and will reflect them in data collection, analysis, and knowledge claim.

It may be important to acknowledge the distinctive features by specific approaches such as phenomenology or grounded theory at some levels such as the type of question they are suited to answer, data collection methods they are consistent with, and also the kinds of analysis and presentation of the results that fit within the approach – such as “goodness of fit” or logical staged linking – and can be referred to as “consistency.”

If such consistency occurs, then the whole thing “hangs together” as coherent; that is, the kind of knowledge generated in the results or presentation section doing what is said it would do following the aims of the project. In order to consider these criteria of consistency and coherence in greater detail, we need to look at the distinctive differences between qualitative approaches in the following: the aims of the research approach, its roots in different disciplines and ideologies, the knowledge claims linked to it, and to a lesser extent, the data collection and analysis specific to each approach.

My experience shows that novice researchers have some problems to justify their methodology of choice and sometimes they experience some degree of methodological slurring. They do not have any clear understanding of the research process in terms of data gathering strategies, data analysis method, and even appropriate sampling plan, which should be indentified based on philosophical and methodological principles.

Finally, besides the above-mentioned problems, regarding research design, there are two common problems encountered especially by students who want to do qualitative study; sometimes researchers and research team try to identify everything, even the sample size, in advance when they design their study because they have a strong background of quantitative research, and this is completely in contrast with the flexible nature and explorative approach of qualitative research. The other problem is the examination committee and the format of proposal of grant sites and funding agencies, which are based on the principles of quantitative study. This rigid format pushes the researchers to try to clarify everything in advance. So, flexibility is regarded as the most important credibility criterion in all kinds of qualitative research and it should be considered when designing the study and following its process.

**Conclusions**

Qualitative research focuses on social world and provides investigators with the tools to study health phenomena from the perspective of those experiencing them.

Identifying the research problem, forming the research question, and selecting an appropriate methodology and research design are some of the initial challenges that researchers encounter in the early stages of a qualitative research project.

Once the research problem and the initial research question are identified, the crucial decision has to be made in selecting the appropriate methodology. Subsequent arrangements would be on the proper methods of data collection, and choosing the participants and the research setting according to the methodology and the research question. It is highly recommended that the researchers exactly understand the nature and character of their inquiries and the knowledge they choose to create before adhering to a distinct research methodology based on scientific knowledge.

The essence and type of the research question or problem, the researcher’s epistemological stance, capabilities, knowledge, skills and training, and the resources available for the research project are the criteria upon which the adopting methodology and procedures depend.

Inconsistency between research question and methodology, insufficient methodological knowledge, and lack of attention to the philosophical underpinning of qualitative methodology are some important challenges.

Lack of knowledge, experience, and skills to do qualitative research can hinder the formation of original knowledge and improvement in understanding the phenomenon under study. The result of such a study will not be new and interesting, and even the study process will be very mechanical without
good interpretation or enough exploration. A good research question is one that allows us to identify what we really want to know. However, at the beginning of a project, researchers may be wavering about what they exactly intend to know; so, vague questions can lead to an unfocused project.

Broad literature review, personal and professional experience, and/or expert opinion can be regarded as the main sources to identify interesting research topics and research questions as well. Forming the research question is one of the initial challenges that researchers encounter in the early stages of a research project. Therefore, it acquires significance by the very fact that it provides brief, but nevertheless, important information on the research topic that allows the reader to decide if the topic is relevant, researchable, and a remarkable issue that can help the researcher to determine the manner of conducting the study.

Then crucial decisions need to be made about an appropriate methodology. The main concern of novice researchers is to find the reason and appropriate design to do the research and the proper methodology to answer the question. Researchers first ought to figure out the planning of qualitative research and how to choose the methodology.

It is very important to consider thorough planning in all stages of the research process, from developing the question to final write-up of the findings for publication. It is worth knowing that some of the details of a qualitative research project cannot be ascertained in advance and may be specified as they arise during the research process. For a novice researcher, more discussions and debates are necessary before selecting and justifying an approach.

Method-slurring is another common problem, which means the act of blurring distinctions between qualitative approaches. Each approach has to demonstrate its consistency to its foundations and will reflect them in data collection, analysis, and knowledge claim.

It is not rare to find that researchers and research team try to identify everything, even sample size, in advance when they design their qualitative study because of the strong background they have about the quantitative research. This is completely in contrast with the flexible nature and explorative approach of qualitative research; as these kinds of researches are completely explorative, the mentioned issues – such as sample size – should be clarified in the course of the study.

The other problem is the examination committee and the format of proposal in the grant sites and funding agencies, which is based on the principles of quantitative study. Therefore, flexibility is actually the most important credibility criterion in all qualitative researches that should be considered when a study is designed and the study process is followed.

As the final word, the researcher should make sure that he/she gives serious consideration to the chosen area as the basis of research and that a qualitative project is relevant and possible. Thus, forming the research question in a proper way and selecting appropriate methodology can guarantee original, interesting, and applied knowledge, which at least can increase our understanding about the meaning of certain conditions for professionals and patients and how their relationships are built in a particular social context.

**REFERENCES**

1. Sofaer S. Qualitative methods: What are they and why use them? Health Serv Res 1999;34:1101-18.
2. Malterud K. Qualitative research: Standards, challenges, and guidelines. Lancet 2001;358:483-8.
3. Çeңa D, Rodriguez JM, Martínez EP. Emergency nursing (2): Qualitative research in Emergency medicine; design and areas of applications in emergency care. Emergencias 2012;24:410-3.
4. Malterud K. The art and science of clinical knowledge: Evidence beyond measures and numbers. Lancet 2001;358:397-400.
5. Squires A. Methodological challenges in cross-language qualitative research: A research review. Int J Nurs Stud 2009;46:277-87.
6. Corbin, J. and A. Strauss, Basics of qualitative research: Techniques and procedures for developing grounded theory. 3rd ed. Thousand Oaks, CA: Sage Publication Inc.; 2008.
7. Gelling L. The complexities of using grounded theory: Leslie Gelling looks at the importance of thorough planning for all stages of the research process. Nurse Res 2011;18:4-5.
8. Gerrish K, Lacey A. The research process in nursing. New York, United States: John Wiley and Sons; 2010.
9. Kapoulas A, Mitic M. Understanding challenges of qualitative research: Rhetorical issues and reality traps. Qualitative Market Research. Int J 2012;15:354-68.
10. Holloway I, Wheeler S. Qualitative research in nursing and healthcare. New York, United States: John Wiley and Sons; 2013.
11. Holloway I. Qualitative research in health care. United States: McGraw-Hill International; 2005.
12. Kinmond K. Coming up with a research question. Doing your qualitative psychology project. 2012. p. 23-36. Available from: http://ls-tlss.ucl.ac.uk/course-materials/PUBLG004_70230.pdf.
13. Mantzoukas S. Facilitating research students in formulating qualitative psychology project. 2012. Available from: http://ls-tlss.ucl.ac.uk/course-materials/PUBLG004_70230.pdf.

**How to cite:** Khankeh H, Ranjbar M, Khorasani-Zavareh D, Zargham-Boroujeni A, Johansson E. Challenges in conducting qualitative research in health: A conceptual paper. Iranian J Nursing Midwifery Res 2015;20:635-41.

**Source of Support:** Nil, **Conflict of Interest:** None declared.