

### **Medical Teacher**



ISSN: 0142-159X (Print) 1466-187X (Online) Journal homepage: www.tandfonline.com/journals/imte20

# Twelve tips for conducting qualitative research interviews

Cormac McGrath, Per J. Palmgren & Matilda Liljedahl

**To cite this article:** Cormac McGrath, Per J. Palmgren & Matilda Liljedahl (2019) Twelve tips for conducting qualitative research interviews, Medical Teacher, 41:9, 1002-1006, DOI: 10.1080/0142159X.2018.1497149

To link to this article: https://doi.org/10.1080/0142159X.2018.1497149

<u></u>	© 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
	Published online: 28 Sep 2018.
	Submit your article to this journal $oldsymbol{oldsymbol{\mathcal{G}}}$
lılıl	Article views: 352437
Q	View related articles ☑
CrossMark	View Crossmark data 🗗
2	Citing articles: 287 View citing articles 🗹





TWELVE TIPS

a OPEN ACCESS



#### Twelve tips for conducting qualitative research interviews

Cormac McGrath<sup>a,b</sup> , Per J. Palmgren<sup>a</sup> and Matilda Liljedahl<sup>a,c</sup>

<sup>a</sup>Department of Learning, Informatics, Management and Ethics, Karolinska Institutet, Stockholm, Sweden; <sup>b</sup>Department of Education, Stockholm University, Stockholm, Sweden; <sup>c</sup>Primary Health Care Unit, Institute of Medicine, The Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

#### **ABSTRACT**

The qualitative research interview is an important data collection tool for a variety of methods used within the broad spectrum of medical education research. However, many medical teachers and life science researchers undergo a steep learning curve when they first encounter qualitative interviews, both in terms of new theory but also regarding new methods of inquiry and data collection. This article introduces the concept of qualitative research interviews for novice researchers within medical education, providing 12 tips for conducting qualitative research interviews.

#### Introduction

In medical education research, the qualitative research interview is a viable and highly utilized data-collection tool (DiCicco-Bloom and Crabtree 2006; Jamshed 2014). There are a range of interview formats, conducted with both individuals and groups, where semi-structured interviews are becoming increasingly prevalent in medical education research. Qualitative interviews afford researchers opportunities to explore, in an in-depth manner, matters that are unique to the experiences of the interviewees, allowing insights into how different phenomena of interest are experienced and perceived. Considering the relationship between participants and researchers and the emphasis on the exploration of human phenomena, interviews have traditionally been a data-collection method linked with qualitative research and the naturalistic paradigm (Côté and Turgeon 2005; Halcomb and Davidson 2006).

In medical education, many researchers have a background in health care professional backgrounds, and although subjects, such as interview techniques and history-taking are included in medical, nursing, and other health professional curricula, the acquisition of interview skills for the purpose of collecting research data is not generally addressed in the broad spectrum of health care professional education. Consequently, making the transition from working as a health care professional to conducting medical education research involving qualitative research interviews presents a number of challenges (Hodges and Kuper 2012; Varpio et al. 2015). Not only does the new discipline present challenges in the form of engaging with new types of theoretical knowledge, often presented as learning theories, but novices to medical education research will undoubtedly encounter a range of new methods of inquiry and data collection, including the qualitative research interview (Laksov et al. 2017). Furthermore, there are few guidelines relating to the practice of conducting qualitative research interviews. Brinkmann and Kvale (2005)

argue that one of the challenges of conducting interviews is that they are carried out under the naïve assumption that the researcher wants to achieve understanding through dialog and discussion. Interviews should not be conceived as informal chats with interviewees; instead they are data-collection instruments which can be used to penetrate a number of research questions. Consequently, given the emerging position of interviews in medical education research, we identify the need to articulate 12 tips for conducting qualitative research interviews.

The tips presented below borrow insights from our own experiences as qualitative researchers as well as from the extensive literature on qualitative research methods. The tips may be more useful in different phases of the interview, some tips may be relevant during the planning phase, others while conducting interviews, while others still are most relevant after the interview.

#### Tip 1

## Identify when qualitative research interviews are appropriate

Qualitative interviewing is a data-collection tool that is useful in a range of methodological approaches and may therefore be applied to address a number of research questions. However, qualitative research interviews are preferable when the researcher strives to understand the interviewee's subjective perspective of a phenomenon rather than generating generalizable understandings of large groups of people, for example, the qualitative interview may lend itself well to exploring a patient's experience of illness, or a clinician's conceptions of learning in the workplace. As such, a study applying qualitative interviews holds the potential to give voice to minorities and groups in society that may not be heard elsewhere (Reeves et al. 2015). Moreover, one should consider the ethical dimensions of taking up time from

interviewees and therefore only include as many participants as needed in the research project and who may have insights or experiences of the phenomenon in question.

#### Tip 2

#### Prepare yourself as an interviewer

The importance of accurate preparation on behalf of the interviewer should not be underestimated and includes conceptual and practical preparations (Brinkmann and Kvale 2005; Brinkmann 2014). Successful interviews start with careful planning that considers the focus and scope of the research question. Some background reading of the literature concerning the subject area as well as how to conduct qualitative interviews and the specific scientific method you are applying will be necessary in the further development of your research question(s) and it will additionally facilitate the construction of an interview guide.

When preparing for qualitative interviewing it is important to be familiar with the data recording equipment being used. The venue of the interview should also be considered as it may affect the data collection. We recommend interviews be conducted at a time and place of the respondents' convenience, in a comfortable setting, free from any potential disruptions and noise. In most cases, you will need formal ethical approval. However, you will always need your interviewees' informed consent (Illing 2014).

#### Tip 3

#### Construct an interview guide and test your questions

Conducting a qualitative research interview means that you may be asking your interviewees to reflect on matters that are potentially important to them, in some cases even lifechanging. The phenomenon of your interest might be important professionally, or you may be interviewing participants on how they experience illness or the loss of a loved one. Therefore, you should develop your interview guide in advance and conduct at least one test interview. By conducting test interviews the novice researcher gains skills prior to embarking on data collection. These test interviews may be undertaken with peers or volunteers. They furnish the researcher with an opportunity to explore language, the clarity of the questions, and aspects of active listening. The style of the interview is essential for creating a noninvasive and open dialog with interviewees (Krag Jacobsen 1993). Avoid using esoteric jargon in your research interview questions and instead adopt layman's language when possible.

Qualitative interviews may be more or less open or structured. An unstructured or semi-structured interview guide may include only one or a few predetermined questions allowing the interviewer to explore issues brought forward by the interviewee. It is important that the interview guide aligns with the methodological approach (Laksov et al. 2017). By contrast, a structured interview guide usually includes predetermined questions posed in the same way to all interviewees with the purpose of eliciting responses to the exact same phrasing. In medical education, semistructured interviews are often applied, meaning that the interview guide includes a number of predetermined guestions (typically 5-15 questions) but the interviewer can

probe, in order to dig deeper, into the interviewees' responses through follow-up questions (Lingard and Kennedy 2010). It is usually a good idea to open the interview with a few "easy" questions to make the interviewee comfortable and to familiarize him/her with the subject of the interview. A few examples are: "Please tell me, how long have you been working here?", "How did you first become involved in teaching?" or "Why did you want to become a nurse?" Further into the interview, questions like "In your opinion, what signifies a skilled teacher?" or "How have you experienced the work load in your current workplace?" are more likely to be answered considerately as opposed to if they were posed as the first question of the interview. A question like "Is there anything more you would like to add?" can be a suitable closing question.

#### Tip 4

#### Consider cultural and power dimensions of the interview situation

An assessment of the cultural dimensions as well as power dimensions is necessary prior to the interview (Nimmon and Stenfors-Hayes 2016). Such an analysis could entail a consideration of what the interview situation affords and what obstacles are likely to occur. People are cultural beings (Rogoff 2003) and may have different expectations of the interview situation. Some people may view the interview as a difficult or invasive situation, and some interviews may require a third person to sit in, either as an interpreter or as someone who is culturally sensitive to the interviewees' situation. The test interview outlined above may reveal such challenges. Medical teachers interviewing students need to be aware of both explicit and implicit power relationships and be conscious that students are not trying to comply with expectations of providing, what is perceived to be, a correct response. Similarly, a student interviewing teachers may involve and mirror a power relationship and would require careful consideration in advance.

#### Tip 5

#### **Build rapport with your respondents**

Building rapport and establishing comfortable interactions in the qualitative interview situation is very important and is preferably done well in advance of the interview, but also during the interview itself. A challenge when conducting interviews is that there may be little time in the interview situation to build trust (DiCicco-Bloom and Crabtree 2006). Therefore, you should draft a short summary of your research project, written in layman's terms, to send to your interviewees prior to the interview as a way of informing them of what to expect will be talked about in the interview and why it is an important topic to discuss.

Rapport is also crucial during the interview enabling the respondent to provide a rich and detailed account of the experiences at the heart of the study. Key to building rapport is a sense of proximity. If you already know your respondents, then it may be easier to build rapport; otherwise, this task may be more difficult. One way of building rapport is to approach interviewees with an open and curious attitude, stating specifically why you are interested in

their specific point of view (Krag Jacobsen 1993; Schoultz et al. 2001; Bell 2014). A question like "Please tell me about your interest in ...?" is likely to be understood as less threatening than "What rules and regulations do you follow when ..."

#### Tip 6

#### Remember you are a co-creator of the data

In qualitative research, the researcher is the prime instrument of data collection. Consequently, the interviewer needs to be reflexive, conscious, and aware about how his or her role might impact the conversation between the interviewer and interviewee. In the qualitative research interview, we argue that the interviewer should not be viewed as someone contaminating or biasing the data, but rather as a co-creator of data together with the interviewee, where the interviewer's previous knowledge may play an important part in understanding of the context or the experiences of the interviewee. As such, the interviewer is not a passive player in the interview, but an instrument using his and her abilities, experiences and competencies in the interview situation (Lingard and Kennedy 2010). For example, an interviewer who is also a clinician may use his or her knowledge about the clinical environment and invite the interviewee to discuss clinical issues more in-depth than if the interviewer was unfamiliar to the clinical context. Therefore, we urge interviewers to make use of their background, albeit, in a considerate way.

#### Tip 7

#### Talk less and listen more

Inexperience as novice interviewers may result in the interviewer being overly active in the conversations. Due to nervousness in such situations, or a lack of experience, the interviewee may end up filling in blanks and driving the conversation in a certain direction without being aware of doing so. Interviewers may need to talk less and allow for silence to act as the catalyst that will drive the conversation forward. Actively listening to the interviewees means respecting silence and identifying such silent moments as an opportunity for ongoing reflection. Interviews on subjects that have profound meaning for interview subjects may prompt deep reflection on behalf of respondents. Thus, remain open and honest, maintain interest (Bowden and Walsh 2000; Seidman 2013), listen more, but also listen actively (Giger 2017).

#### Tip 8

#### Allow yourself to adjust the interview guide

Adjusting the questions after the initial interviews allows the interview guide to be fine-tuned during the interview process. Some questions might turn out to be misunderstood, others to be irrelevant or outside the scope of the research question. In one of our own studies, for example, the question "How do you experience the atmosphere here?" was understood by students as a question about the physical environment and the quality of the air,

while the intention of the interviewer was to gain insight into the social environment in the clinic (Liljedahl et al. 2015). So be attentive, listen to how your interviewees respond, and reflect on whether your questions are being understood in the way you intended. During an interview, follow-up questions can help probe how your questions are understood. Also, be courageous and make changes in the interview guide before the next interview when necessary.

#### Tip 9

#### Be prepared to handle unanticipated emotions

In the field of medical education, we sometimes engage with research topics involving illness and death or interviewees' own experiences of e.g. harassment, stress, failure, or interviewee's experiences of students with mental illness. These and many other topics may evoke uneasy emotions in the interviewee, which he or she previously might have been unaware of. Therefore, the interviewer must be sensitive to the interviewee's reactions when sharing experiences on certain topics. Sometimes interviewees will be capable of handling these emotions themselves, but at other times you, as an interviewer, will need to take action to protect your interviewee (Varpio and McCarthy 2018). This might involve interrupting the interview and guiding the interviewee to appropriate assistance. Invite the interviewee to bring up issues of the topic that are important to him or her, and always end the interview by asking the interviewee if there is anything they would like to add regarding the topic of interest in the interview.

#### Tip 10

#### Transcribe the interviews in good time

Once the data has been collected, the process of data transcription commences. Although rarely explicitly defined, transcription can be described as the process of reproducing spoken words, such as recorded data from an interview, and converting it into written form so the data can be analyzed. The most common form of transcription in qualitative interviews is verbatim transcription, which refers to the word-for-word reproduction of verbal data, where the written words are an exact replication of the audiorecorded words (Poland 1995). Transcribing data from qualitative interviews is very time-consuming. For novices, initial transcription may require as much as four to eight hours of transcription for each hour of recorded data. Furthermore, the process yields vast amounts of material which must be iteratively scrutinized and waded through when analyzing the data. It is easy to think that transcription is a somewhat straightforward conversion of the spoken word into written word. It is important to consider pauses, giggles, and other cues offered by the interviewee as markers for important events in the interview. These cues may need to be acknowledged in the transcription process. During the transcription process errors can creep in which can be the result of different factors. Consequently, steps need to be taken to check the quality of the transcription. Many investigators choose to transcribe the qualitative interviews themselves even though that is time-consuming and arduous, as it offers great



benefits in terms of getting to know the data. When doing so, we recommend researchers transcribe the interview as soon as possible after completion. Doing so allows the researcher to start identifying analytical structures and find similarities and differences between different interviewees' experiences.

#### **Tip 11**

#### Check the data

As part of ensuring trustworthiness in qualitative datadriven explorations, member checking, also known as respondent validation or participant validation, can be used. Member checking is a method of returning an interview transcript or debriefing the analytical results with participants for agreement (Lincoln and Guba 1985; Creswell 2013). Our experience suggests that this process offers novice researcher a good opportunity to check the quality of the data. As such, member checking may act as a sounding board and a way of checking that one has understood the reported responses of the respondents, especially when it comes to picking up subtleties such as irony, emotions, silences, or other gestures (Birt et al. 2016; McGrath et al. 2016). However, some researchers recommend caution with reference to member checking, as there may be some potential drawbacks such as conflicting views on interpretation (Angen 2000; Morse et al. 2002; Varpio et al. 2017).

#### **Tip 12**

#### Initiate analysis early

One of the main difficulties with qualitative research is that it very rapidly generates a large and cumbersome amount of data, often leading to hundreds of pages of transcribed text. Miles (1979) has depicted qualitative data as an "attractive nuisance"; it has attractiveness due to its richness, but effort is required to find analytical paths through that richness. Therefore, you will need to think about the analysis of data before conducting all the interviews. The nature of the research question(s) and how you go about the analysis will determine the depth, quality, and richness of the performed interviews. Hence, we advise that the analysis of the material is not left until all interview data has been transcribed. Procrastination of data analysis may give the investigator the impression of facing a monumental task; meanwhile, an advantage of starting the work soon is that early thoughts about the analysis allow the investigator to become more aware of emerging categories and themes.

#### Summary

The qualitative research interview is a powerful data-collection tool which affords researchers in medical education opportunities to explore unknown areas of education and practice within medicine. This paper articulates 12 tips for consideration when conducting qualitative research interviews, and outlines the qualitative research interview in general terms. We acknowledge that certain methodologies might demand alternative procedures than those described above. Although the 12 steps above are ordered sequentially, the qualitative interview, as a rigorous data collection

tool, requires an iterative and reflective working process in order to best serve its purpose.

#### Acknowledgments

We would hereby like to thank Dr Terese Stenfors, and members of SHERN (Swedish Higher Education Research Network) for input on earlier versions of the manuscript.

#### **Disclosure statement**

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

#### Notes on contributors

Cormac McGrath, PhD, is a senior lecturer and academic developer at Stockholm University and Karolinska Institutet.

Per J. Palmgren, RC, MMedEd, PhD, is a lecturer in medical education and researcher in educational science at Karolinska Institutet.

Matilda Liljedahl, MD, PhD, is a researcher in medical education at Karolinska Institutet and at the Sahlgrenska Academy at the University of Gothenburg.

#### **ORCID**

Cormac McGrath (i) http://orcid.org/0000-0002-8215-3646 Per J. Palmgren http://orcid.org/0000-0001-7499-9329 Matilda Liljedahl (i) http://orcid.org/0000-0003-2011-8180

#### References

Angen MJ. 2000. Evaluating interpretive inquiry: Reviewing the validity debate and opening the dialogue. Qual Health Res. 10:378–395.

Bell J. 2014. Doing your research project: a guide for first-time researchers. Berkshire: McGraw-Hill Education.

Birt L, Scott S, Cavers D, Campbell C, Walter F. 2016. Member checking: a tool to enhance trustworthiness or merely a nod to validation? Qual Health Res. 26:1802-1811.

Bowden JA, Walsh E. 2000. Phenomenography. Melbourne: RMIT University Press.

Brinkmann S. 2014. Interview, In Teo T, editor, Encyclopedia of Critical Psychology. New York (NY): Springer.

Brinkmann S, Kvale S. 2005. Confronting the ethics of qualitative research, J Constr Psychol, 18:157-181.

Côté L, Turgeon J. 2005. Appraising qualitative research articles in medicine and medical education. Med Teach. 27:71-75.

Creswell JW. 2013. Qualitative Inquiry and Research Design. Thousand Oaks: Sage Publications.

DiCicco-Bloom B, Crabtree BF. 2006. The qualitative research interview. Med Educ. 40:314-321.

Giger JN. 2017. Transcultural nursing: assessment and intervention. 7th ed. St. Louis, Toronto: Mosby.

Halcomb EJ, Davidson PM. 2006. Is verbatim transcription of interview data always necessary? Appl Nurs Res. 19:38-42.

Hodges BD, Kuper A. 2012. Theory and practice in the design and conduct of graduate medical education. Acad Med. 87:25-33.

Illing J. 2014. Thinking about research: Theoretical perspectives, ethics and scholarship. In Swanwick T, editor. Understanding Medical Education: Evidence, Theory and Practice. West Sussex: Wiley-Blackwell; p.331-347.

Jamshed S. 2014. Qualitative research method-interviewing and observation . J Basic Clin Pharm. 5:87-88.

Krag Jacobsen J. 1993. Intervju -konsten att lyssna och fråga [Interview-The Art of Listening and Asking]. Lund: Studentlitteratur.

Laksov KB, Dornan T, Teunissen PW. 2017. Making theory explicit - an analysis of how medical education research(ers) describe how they connect to theory . BMC Med Educ. 17:18

- Liljedahl M, Boman LE, Bjorck E, Laksov KB. 2015. Participation in a clinical learning environment. Clin Teach. 12:284–285.
- Lincoln YS, Guba EG. 1985. Naturalistic inquiry (Vol. 75). Beverly Hills: Sage Publications.
- Lingard L, Kennedy TJ. 2010. Qualitative research methods in medical education. In Swanwick T, editor. Understanding medical education: evidence, theory and practice. West Sussex: Wiley-Blackwell; p. 323-335.
- Nimmon L, Stenfors-Hayes T. 2016. The "handling of power in the physician-patient encounter: perceptions from experienced physicians". BMC Med Educ. 16:114.
- McGrath C, Barman L, Stenfors-Hayes T, Roxå T, Silén C, Laksov KB. 2016. The ebb and flow of educational change: change agents as negotiators of change. T&LI. 4:1-14.
- Miles MB. 1979. Qualitative data as an attractive nuisance. Adm Sci Q. 24:590-601.
- Morse JM, Barrett M, Mayan M, Olson K, Spiers J. 2002. Verification strategies for establishing reliability and validity in qualitative research. Int J Qual Methods. 1:13-22.
- Poland B. 1995. Transcription quality as an aspect of rigor in qualitative research. Qual Inq. 1:290-310.
- Reeves S, McMillan SE, Kachan N, Paradis E, Leslie M, Kitto S. 2015. Interprofessional collaboration and family member involvement in

- intensive care units: emerging themes from a multi-sited ethnography. J Interprof Care. 29:230-237.
- Rogoff B. 2003. The cultural nature of human development. New York (NY): Oxford University Press.
- Schoultz J, Säljö R, Wyndhamn J. 2001. Heavenly talk: Discourse, artifacts, and children's understanding of elementary astronomy. Hum Dev. 44:103-118.
- Seidman I. 2013. Interviewing as qualitative research: a guide for researchers in education and the social sciences. New York (NY): Teachers College Press.
- Varpio L, Ajjawi R, Monrouxe LV, O'Brien BC, Rees CE. 2017. Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. Med Educ. 51:40-50.
- Varpio L, McCarthy A. 2018. How a needs assessment study taught us a lesson about the ethics of educational research. Perspect Med
- Varpio L, Martimianakis MA, Mylopoulos M. 2015. Qualitative research methodologies: embracing methodological borrowing, shifting and importing. In: Cleland J, Durning SJ, editors. Researching medical education. West Sussex: Wiley-Blackwell; p. 245-256.