Overview of Qualitative Research

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Research Methodology

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Qualitative research methods are a robust tool for chaplaincy research questions. Similar to much of chaplaincy clinical care, qualitative research generally works with written texts, often transcriptions of individual interviews or focus group conversations and seeks to understand the meaning of experience in a study sample. This article describes three common methodologies: ethnography, grounded theory, and phenomenology. Issues to consider relating to the study sample, design, and analysis are discussed. Enhancing the validity of the data, as well reliability and ethical issues in qualitative research are described. Qualitative research is an accessible way for chaplains to contribute new knowledge about the sacred dimension of people's lived experience.

KEYWORDS chaplaincy, ethnography, grounded theory, phenomenology, qualitative research

INTRODUCTION

Qualitative research is, "the systematic collection, organization, and interpretation of textual material derived from talk or conversation. It is used in the exploration of meanings of social phenomena as experienced by individuals themselves, in their natural context" (Malterud, 2001, p. 483). It can be the most accessible means of entry for chaplains into the world of research because, like clinical conversations, it focuses on eliciting people's stories. The stories can actually be expressed in almost any medium: conversations (interviews or focus groups), written texts (journal, prayers, or

letters), or visual forms (drawings, photographs). Qualitative research may involve presenting data collected from a single person, as in a case study (Risk, 2013), or from a group of people, as in one of my studies of parents of children with cystic fibrosis (CF) (Grossoehme et al., 2013). Whole books are devoted to qualitative research methodology and, indeed, to the individual methods themselves. This article is intended to present, in rather broad brushstrokes, some of the "methods of choice" and to suggest some issues to consider before embarking on a qualitative research project. Helpful texts are cited to provide resources for more complete information.

Although virtually anything may be data, spoken mediums are the most common forms of collecting data in health research, so the focus of this article will mainly be on interviews and to a lesser extent, focus groups. Interviews explore experiences of individuals, and through a series of questions and answers, the meaning individuals give to their experiences (Tong, Sainsbury, & Craig, 2007). They may be "structured" interviews, in which an interview guide is used with pre-determined questions from which no deviation is permitted by the interviewer, or semi-structured interviews, in which an interview guide is used with pre-determined questions and potential follow-up questions. The latter allows the interviewer to pursue topics that arise during the interview that seem relevant (Cohen & Crabtree, 2006). Writing good questions is harder than it appears! In my first unit of CPE, the supervisor returned verbatims, especially our early efforts, with "DCFQ" written in the margin, for "direct, closed, factual question." We quickly learned to avoid DCFQs in our clinical conversations because they did not create the space for reflection on illness and the sacred the way open-ended questions did. To some extent, writing good open-ended questions that elicit stories can come more readily to chaplains, due perhaps to our training, than to investigators from other disciplines. This is not to say writing an interview guide is easy or an aspect of research that can be taken lightly, as the quality of the data you collect, and hence the quality of your study, depends on the quality of your interview questions.

Data may also be collected using focus groups. Focus groups are normally built around a specific topic. They almost always follow a semi-structured format and include open discussion of responses among participants, which may range from four to twelve people (Tong et al., 2007). They provide an excellent means to gather data on an entire range of responses to a topic, or on the social interactions between participants, or to clarify a process. Once the data are collected, the analytic approach is typically similar to that of interview data.

Qualitative investigators are not disinterested outsiders who merely observe without interacting with participants, but affect and are affected by their data. The investigator's emotions as they read participants' narratives are data to be included in the study. Simply asking "research" questions

can itself be a chaplaincy intervention: what we ask affects the other person and can lead them to reflect and change (Grossoehme, 2011). It is important to articulate our biases and understand how they influence us when we collect and analyze data. Qualitative research is often done by a small group of researchers, especially the data coding. This minimizes the bias of an individual investigator. Inevitably, two or more people will code passages differently at times. It is important to establish at the outset how such discrepancies will be handled.

Ensuring Rigor, Validity, and Reliability

Some people do not think qualitative research is not very robust or significant. This attitude is due, in part, to the poor quality of some early efforts. Increasingly, however, qualitative studies have improved in rigor, and reviewers of qualitative manuscripts expect investigators to have addressed problematic issues from the start of the project. Two important areas are validity and reliability. Validity refers to whether or not the final product (usually referred to a "model") truly portrays what it claims to portray. If you think of a scale on which you weigh yourself, you want a valid reading so that you know your correct weight. Reliability refers to the extent to which the results are repeatable; if someone else repeated this study, would they obtain the same result? To continue the scale analogy, a reliable scale gives the same weight every time I step on it. A scale can be reliable without being valid. The scale could reliably read 72 pounds every time I step on it, but that value is hardly correct, so the measure is not valid.

VALIDITY

Swinton and Mowat (2006) discussed ensuring the "trustworthiness" of the data. N narrative data which are "rich" in their use of metaphor and description, and which express deeper levels of meaning and nuance compared to everyday language are likely to yield a trustworthy final model because the investigators have done a credible job of completely describing and understanding the topic that is under study. Validity is also enhanced by some methodologies, such as grounded theory, which use participants' own words to name categories and themes, instead of using labels given by the investigator. The concept of "member checking" also enhances validity. Once the analyses are complete and a final model has been developed, these findings are shown to all or some of the participants (the members) who are invited to check the findings and give feedback. Do they see themselves in the words or conceptual model that is presented? Do they offer participants a new insight, or do they nod agreement without really reengaging the findings?

RELIABILITY

One means of demonstrating reliability is to document the research decisions made along the way, as they were made, perhaps in a research diary (Swinton & Mowat, 2006). Qualitative methodologies accept that the investigator is part of what is being studied and will influence it, and that this does not devalue a study but, in fact, enhances it. Simply deciding what questions to ask or not ask, and who you ask them to (and not) reflect certain decisions that should be consciously made and documented. Another researcher should be able to understand what was done and why from reading the research diary.

ETHNOGRAPHIC RESEARCH

Elisa Sobo (2009) defines ethnography as the presentation of, "...a given group's conceptual world, seen and experienced from the inside" (p. 297). Ethnography answers the question, "what's it like to be this person?" One example of this kind of study comes from the work of Fore and colleagues (Fore, Goldenhar, Margolis, & Seid, 2013). In order to design tools that would enable clinicians and persons with pediatric inflammatory bowel disease (IDB) to work together more efficiently, an ethnographic study was undertaken to learn what it was like for a family when a child had IDB. After 36 interviews, the study team was able to create three parent-child dyad personas: archetypes of parents and children with IDB based directly on the data they gathered. These personas were used by the design team to think about how different types of parents and children adapted to the disease and to think what tools should be developed to help different types of parents and children with IDB. An ethnographic study is the method of choice when the goal is to understand a culture, and to present, or explain, its spoken and unspoken nature to people who are not part of the culture, as in the example above of IDB. Before "outsiders" could think about the needs of people with IDB, it was necessary to learn what it is like to live with this disease.

Sampling

Determining the sample in ethnographic studies typically means using what is called a purposive sample (Newfield, Sells, Smith, Newfield, & Newfield, 1996). Purposive samples are based on criteria that the investigator establishes at the outset, which describe participant characteristics. In the aforementioned IDB example, the criteria were: (1) being a person with IDB who was between 12 and 22 years old or the parent of such a child; (2) being or having a child whose IDB care was provided at one of a particular group of treatment centers; (3) being a pediatric gastrointestinal nurse at one of the centers; or (4) a physician/researcher at one of five treatment centers. Having

a sample that is representative of the larger population, always the goal in quantitative research, is not the point in ethnographic studies. Here, the goal is to recruit participants who have the experience to respond to the questions. Out of their intimate knowledge of their culture, the investigator can build a theory, or conceptual model, which could later be tested for generalizability in an entire population.

Design

Ethnographic study designs typically involve a combination of data collection methods. Whenever possible, observing the participants in the midst of whatever experience is the study's focus is desirable. In the process of an ethnographic project on CF, for instance, two students spent a twelve-hour period at the home of a family with a child who had CF, taking notes about what they saw and heard. Interviews with participants are frequently employed to learn more about the experience of interest. An example of this is the work of Sobo and colleagues, who interviewed parents of pediatric patients in a clinic to ask about the barriers they experienced obtaining health care for their child (Seid, Sobo, Gelhard, & Varni, 2004). Diaries and journals detailing people's lived experience may also be used, alone, or in combination with other methods.

Analysis

Analysis of ethnographic data is variable, depending on the study's goal. One common analytic approach is to begin analysis after the first few interviews have been completed, and to read them to get a sense of their content. The next step is to name the seemingly important words or phrases. At this point, one might begin to see how the names relate to each other; this is the beginning of theory development. This process continues until all the data are collected. At that point, the data are sorted by the names, with data from multiple participants clustered under each topic name (Boyle, 1994). Similar names may be grouped together, or placed under a larger label name (i.e., category). In a sense, what happens is that each interviewer's voice is broken into individual fragments, and everyone's fragments that have the same name are put together. From individual voices speaking on multiple topics, there is now one topic with multiple voices speaking to it.

GROUNDED THEORY RESEARCH

Grounded theory is "grounded" in its data; this inductive approach collects data while simultaneously analyzing it and using the emerging theory to inform data collection (Rafuls & Moon, 1996). This cycle continues until

the categories are said to be "saturated," which typically means the point when no new information is being learned (Morse, 1995). This methodology is generally credited to Glaser and Strauss, who wanted to create a means of developing theoretical models from empirical data (Charmaz, 2005). Perhaps, more than in any other qualitative methodology, the person of the investigator is the key. The extent to which the investigator notices subtle nuances in the data and responds to them with new questions for future participants, or revises an emerging theory, is the extent to which a grounded theory research truly presents a theory capturing the fullness of the data from which it was built. It is also the extent to which the theory is capable of being used to guide future research or alter clinical practice. Grounded theory is the method of choice when there is no existing hypothesis to test. For instance, there was no published data on how parents use faith to cope after their child's diagnosis with CF. Using grounded theory allowed us to develop a theory, or a conceptual model, of how parents used faith to cope (Grossoehme, Ragsdale, Wooldridge, Cotton, & Seid, 2010). An excellent discussion of this method is provided by Charmaz (2006).

Sampling

The nature of the research question should dictate the sample description, which should be defined before beginning the data collection. In some cases, the incidence of the phenomena may set some limits on the sample. For example, a study of religious coping by adults who were diagnosed with CF after age 18 years began with a low incidence: this question immediately limited the number of eligible adults in a four-state area to approximately 25 (Grossoehme et al., 2012). Knowing that between 12 and 20 participants might be required in order to have sufficient data to convince ourselves that our categories were indeed saturated, limiting our sample in other ways: for example, selecting representative individuals spread across the number of years since diagnosis would not have made sense. In some studies, the goal is to learn what makes a particular subset of a larger sample special; these subsets are known as "positive deviants" (Bradley et al., 2009).

Design

Once the sample is defined and data collection begins, the analytic process begins shortly thereafter. As will be described in the following paragraphs, interviews and other forms of spoken communication are nearly always transcribed, typically verbatim. Unlike most other qualitative methods, grounded theory uses an iterative design. Sometime around the third or fourth interview has been completed and transcribed and before proceeding with further interviews, it is time to begin analyzing the transcripts. There are two aspects to this. The first is to code the data that you have. Grounded

theory prefers to use the participants' own words as the code, rather than having the investigator name it. For example, in the following transcript excerpt, we coded part of the following except:

INTERVIEWER: OK. Have your beliefs or perhaps relationship with God changed at all because of what you've gone through the last nine and 10 months with N.?

INTERVIEWEE: Yeah, I mean, I feel that I'm stronger than I was before actually.

INTERVIEWER: Hmm-hmm. How so? Can you put that into words? I know some of these could be hard to talk about but...

INTERVIEWEE: I don't know, I feel like I'm putting his life more in God's hands than I ever was before.

We labeled, or coded, these data as, "I'm putting his life more in God's hands," whereas in a different methodology we might have simply named it "Trusting God." Focus on the action in the narrative. Although it can be difficult, you as a researcher must try very hard to set your own ideas aside. Remember you are doing this because there is no pre-existing theory about what you are studying, so you should not be guided by a theory you have in your mind. You must let the data speak for themselves.

The second point is to reflect on the codes and what they are already telling you. What questions are eliciting the narrative data you want? Which ones are not? Questions that are not leading you to the data you want probably need to be changed. Interesting, novel ideas may emerge from the data, or topics that you want to know more about that you did not anticipate and so the interviewer did not' follow up on them. What are the data not telling you that you are seeking? All of this information flows back to revising the semi-structured interview guide (Charmaz, 2006). This issue raised mild concern with the IRB reviewer who had not encountered this methodology before. This concern was overcome by showing that this is an accepted method with voluminous literature behind it, and by showing that the types of item revisions were not expected to significantly alter the study's effect on the participants. From this point onward you collect data, code it, and analyze it simultaneously. As you code a new transcript and come across a statement similar to others, you can begin to put them together. If you are using qualitative analysis software such as NVivo ("NVivo qualitative data analysis software," 2012), you can make these new codes "children" of a "parent" node (the first statement you encountered on this topic). The next step is called "focused coding" and in this phase you combine what seems to you

to be the most significant codes (Charmaz, 2006). These may also be the most frequently occurring, or the topic with the most duplicates, but not necessarily. This is not a quantitative approach in which having large amounts of data is important. You combine codes at this stage in such a way that your new, larger, categories begin to give shape to aspects of the theory you think is going to emerge. As you collect and code more data, and revise your categories, your idea of the theory will change.

Axial coding follows, as you look at your emerging themes or categories, and begin to associate coded data that explains that category. Axial coding refers to coding the words or quotations that are around the category's "axis," or core. For example, in a study of parental faith and coping in the first year after their child's diagnosis with CF (Grossoehme et al., 2010), one of the categories which emerged was, "Our beliefs have changed." There were five axial codes which explain aspects of this category. The axial codes were, "Unchanged," "We've learned how fragile life is," "Our faith has been strengthened," "We've gotten away from our parents' viewpoints," and "I'm better in tune with who I am." Each of these axial codes had multiple explanatory phrases or sentences under them; together they explain the breadth and dimensions of the category, "Our beliefs have changed."

The next step is theoretical coding, and here the categories generated during focused coding are synthesized into a theory. Some grounded theorists, notably one of the two most associated with it (Glaser), do not use axial coding but proceed directly to this step as the means of creating coherence out of the data (Charmaz, 2006). As your emerging theory crystallizes, you may pause to see if it has similarities with other theoretical constructs you encountered in your literature search. Does your emerging theory remind you of anything? It would be appropriate to engage in member-checking at this point. In this phase, you show your theoretical model and its supporting categories to participants and ask for their feedback. Does your model make sense to them? Does it help them see this aspect of their experience differently (Charmaz, 2005). Use their feedback to revise your theory and put it in its final form. At this point, you have generated new knowledge: a theory no one has put forth previously, and one that is ready to be tested.

PHENOMENOLOGY RESEARCH

Perhaps the most chaplain-friendly qualitative research approach is phenomenology, because it is all about the search for meaning. Its roots are in the philosophical work of Husserl, Heidegger and Ricoeur (Boss, Dahl, & Kaplan, 1996; Swinton & Mowat, 2006). This approach is based on several assumptions: (1) meaning and knowing are social constructions, always

incomplete and developing; (2) the investigator is a part of the experience being studied and the investigator's values play a role in the investigation; (3) bias is inherent in all research and should be articulated at the beginning; (4) participants and investigators share knowledge and are partners; (5) common forms of expression (e.g., words or art) are important; and (6) meanings may not be shared by everyone (Boss et al.). John Swinton and Harriet Mowat (2006) described the process of carrying out a phenomenological study of depression and spirituality in adults and reading their book is an excellent way to gain a sense of the whole process. Phenomenology may be the method of choice when you want to study what an experience means to a particular group of people. May not be the best choice when you want to be able to generalize your findings. An accurate presentation of the experience under study is more important in this approach than the ability to claim that the findings apply to across situations or people (Boss et al.). A study of the devil among predominately Hispanic horse track workers is unlikely to be generalizable to experiences of the devil among persons of Scandinavian descent living in Minnesota. Care must be taken not to overstate the findings from a study and extend the conclusions beyond what the data support.

Sampling

The emphasis on accurately portraying the phenomenon means that large numbers of participants are not required. In fact, relatively small sample sizes are required compared to most quantitative, clinical studies. The goal is to gather descriptions of their lived experience which are rich in detail and imagery, as well as reflection on its theological or psychological meaning. The likelihood of achieving this goal can be enhanced by using a purposeful sample. That is, decide in the beginning approximately how large and how diverse your sample needs to be. For example, CF can be caused by over 1,000 different genetic mutations; some cause more pulmonary symptoms while others cause more gastrointestinal problems. Some people with CF have diabetes and others do not; some have a functioning pancreas and others need to take replacement enzymes before eating or drinking anything other than water. Some CF adolescents may have lung function that is over 100% of what is expected for healthy adolescents of their age and gender, whereas others, with severe pulmonary disease, may have lung function that is just 30% of what is expected for their age and gender. A study of what it is like for an adolescent to live with a life-shortening genetic disease using this approach might benefit from purposive sampling. For example, lung disease severity in CF is broadly described as mild, moderate or severe. A purposeful sample might call for 18 participants divided into 3 age groups (11–13 years; 14–16 years; and 17–19 years old) and disease severity (mild, moderate, and severe). In each of those nine groups there would be one male and one

female. In actual practice, one might want to have more than 18 to allow for attrition, but this breakdown gives the basic idea of defining a purposive sample. One could reasonably expect that having the experience of both genders across the spectrum of disease severity and the developmental range of adolescence would permit an accurate, multi-dimensional understanding to emerge of what living with this life-shortening disease means to adolescents. In fact, such an accurate description is more likely to emerge with this purposeful sample of 18 adolescents than with a convenience sample of the first 18 adolescents who might agree to participate in the study during their outpatient clinic appointment. Defining the sample to be studied requires some forethought about what is likely to be needed to gain the fullest understanding of the topic.

Design

Any research design may be used. The design will be dictated by what data are required to understand the phenomena and its meaning. Interviews are by far the most common means of gathering data, although one might also use written texts, such as prayers written in open prayer books in hospital chapels, for example (ap Sion, 2013; Grossoehme, 1996), or drawings (Pendleton, Cavalli, Pargament, & Nasr, 2002), or photographs/videos (Olausson, Ekebergh, & Lindahl, 2012). Although the word "text" appears, it should be with the understanding that any form of data is implied.

Analysis

The theoretical underpinnings of phenomenology, which are beyond the scope of this article, suggest to users that "a method" is unnecessary or indeed, contrary, to phenomenology. However, one phenomenological researcher did articulate a method (Giorgi, 1985), which consists of the following steps. First, the research team immerses themselves in the data. They do this by reading and re-reading the transcribed interviews and listening to the recorded interviews so that they can hear the tone and timbre of the voices. The goal at this stage is to get a sense of the whole. Second, the texts are coded, in which the words, phrases or sentences that stand out as describing the experience or phenomena under study, or which express outright its meaning for the participant are extracted or highlighted. Each coded bit of data is sometimes referred to as a "meaning unit." Third, similar meaning units are placed into categories. Fourth, for each meaning unit the meaning of the participants' own words is spelled out. For chaplains, this may mean articulating what the experience means in theological language. Other disciplines might transform the participants' words into psychological, sociological or anthropological language. Here the investigators infer the meaning behind the participants' words and articulate it. Finally, each of

the transformed statements of meaning are combined into a few thematic statements that describe the experience (Bassett, 2004; Boss et al., 1996). After this, it would be appropriate to do member-checking and a subsequent revision of the final model based on participants' responses and feedback.

PRACTICAL CONCERNS

Just as questionnaires or blood samples contain data, in qualitative research it is the recording of people's words, whether in an audio, video, or paper format which hold the data. Interviews, either in-person or by telephone should be recorded using audio, video or both. It is important to have a device with suitable audio quality and fresh batteries. Experience has shown me the benefit of using two audio recorders so that you do not lose data if one of them fails. There are several small recorders available that have USB connections that allow the audio file to be uploaded to a computer easily. To protect participants' privacy, all data should be anonymized by removing any information that could identify individuals. The Standard Operating Procedure in my research group is to replace all participants' names with an "*N*." During the transcription process, all other individuals are identified by their role in square brackets, "[parent]." Depending on the study's goal and the analytic method you have selected, you may want to include symbols for pauses before participants respond, or non-fluencies (e.g., "ummm. . . .", "well . . . uh . . .") or non-verbal gestures (if you are video recording). Decide before beginning whether it is important to capture these as data or not. There are conventional symbols which are inserted into transcriptions which capture these data for you. After the initial transcription, these need to be verified by comparing the written copy against the original recording. Verification should be done by someone other than the transcriptionist. There are several tasks at this stage. Depending on the quality of your recording, the clarity of participants' speech and other factors, some words or phrases may have been unintelligible to the transcriptionist, and this is the time to address them. In my research group our Standard Operating Procedure is to highlight unintelligible text during the transcription phase, and a "verifier" attempts three times to clarify the words on the original recording before leaving them marked "unintelligible" in the transcript. No transcriptionist is perfect and if they are unfamiliar with the topic, they may transcribe the recording inaccurately. I recently verified a transcript where a commercial medical transcriptionist changed the participant's gender from "he" to "she" when the word prior to the pronoun ended with an "s." If this pattern had not been caught during the verification process, it would have been very difficult during the coding to know whether the pronoun referred to the participant or to their daughter.

ETHICAL ISSUES IN QUALITATIVE RESEARCH

Study Design

The issue of power and the possibility of subtle coercion is the concern here. There is an inherent power differential between a research participant and the investigator, which is exacerbated when the investigator is a chaplain. Despite our attempts to be non-threatening, the very words, "chaplain," or "clergy" connote power. For this reason, the chaplain-investigator should not approach potential participants regarding a study. Potential participants may be informed regarding their eligibility to participate by their physician or a chaplain, but the recruitment and informed consent process should be handled by someone else, perhaps a clinical research coordinator. However, as the chaplain-investigator, you will need to teach them how to talk with potential participants about your study and answer their questions. Choose a data collection method that is best-suited to the level of sensitivity of your research topic. Focus groups can provide data with multiple perspectives, and they are a poor choice when there may be pressure to provide socially correct responses, or when disclosures may be stigmatizing. In such cases, it is better to collect data using individual semi-structured interviews.

Risk

Develop a plan for assessing participants' discomfort, anxiety, or even more severe reactions during the study. For instance, what will you do when someone discloses his/her current thoughts of self-harm, or experiences a flashback to a prior traumatic event that was triggered during an interview? How will you handle this if you are collecting data in person? By telephone? You will need to be specific who must be informed and who will make decisions about responding to the risk.

Privacy and Confidentiality

In addition to maintaining privacy and confidentiality of your actual data and other study documents, consider how you will protect participants' privacy when you write the study up for publication. Make sure that people cannot be identified by their quotations that you include as you publish data. The smaller the population you are working with, the more diligently you need to work on this. If the transcriptionist is not an employee of your institution and under the same privacy and confidentiality policies, it is up to you to ensure that an external transcriptionist takes steps to protect and maintain the privacy of participants' data.

CONCLUSION

Qualitative research is an accessible way for chaplains to contribute new knowledge regarding the sacred dimension of people's lived experience. Chaplains are already sensitive to and familiar with many aspects of qualitative research methodologies. Studies need to be designed to be valid and meaningful, and are best done collaboratively. They provide an excellent opportunity to develop working relationships with physicians, medical anthropologists, nurses, psychologists, and sociologists, all of whom have rich traditions of qualitative research. This article can only provide an overview of some of the issues related to qualitative research and some of its methods. The texts cited, as well as others, provide additional information needed before designing and carrying out a qualitative study. Qualitative research is a tool that chaplains can use to develop new knowledge and contribute to professional chaplaincy's ability to facilitate the healing of brokenness and disease.

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