Qualitative Description
A "How-To" Guide

Developed by
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About the Contributors

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Dr. Sullivan-Bolyai and Dr. Bova have worked collaboratively since 2001 and published the frequently cited paper on qualitative description: Sullivan-Bolyai, S., Bova, C., & Harper, D. (2005). Developing and refining interventions in persons with health disparities: The use of qualitative description. *Nursing Outlook, 53, 127–133*. Together they have published 33 studies using qualitative description.

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Preface

This guide is based on multiple presentations we have given to doctoral students about the use of qualitative description (QD) and our own work using QD over the past 21 years. We were motivated to make this guide widely available due to the lack of adequate resources (manuscripts and textbooks) that cover QD. It is our hope that others will be open to this pragmatic approach, which is both creative and rigorous and can be useful for exploring phenomena from a qualitative perspective.

Many published articles claim to use QD (e.g., approximately 3,600 in PubMed). However, guidelines for conducting a QD study are lacking. Kim et al. (2016) expressed a similar sentiment in their systematic review of studies that used QD. The lack of a rigorous systematic approach leads to inconsistencies in sampling procedures, inadequate sample sizes, and lack of theoretical or conceptual orientations to build knowledge.

Research that uses QD is not intended to find underlying interpretive meanings or to describe the culture of a group; it is designed instead to describe the rich, truthful perspectives of those experiencing a specific and focused situation or phenomenon. The results of a QD study are expressed in common, easy-to-understand language. Therefore, it is especially useful when working with clinical populations, communities, and across different cultural groups. The QD approach provides rich description and makes an important contribution to knowledge development. We hope that this guide will become an essential reference for those interested in using this specific qualitative approach.

Introduction: Locating QD Among Other Qualitative Traditions

Qualitative description is considered to lie within the naturalistic inquiry paradigm**.** Naturalistic inquiry is defined as a constructivist perspective that permits us to better understand a phenomenon through the real social world we live in. It is a philosophical perspective that allows an emic view (insider view) from those living the experience

(Bradshaw et al., 2017). Thus, studying humans using a contextual qualitative approach (such as QD) is well suited for phenomenon studied in healthcare. The finished, rich, descriptive product comes from those experiencing the phenomenon. The QD process includes using interviews, observations, documents, and artifacts (Sandelowski, 2002).

Typically, one finds in the qualitative empirical literature the “big 3” qualitative approaches used to study phenomena of interest: phenomenology, grounded theory (GT), and ethnography. The methodological approaches for each of these qualitative approaches are various: van Manen or Merleau-Ponty for phenomenology; Glazer and Strauss or Strauss and Corbin for GT; and for ethnography, Goodall vs. Spradley, who used descriptive methods that focus on studying nature and/or culture in natural environments (Creswell & Poth, 2018). These descriptive variations in qualitative methods focus on the procedures and the analysis process.

QD is a research approach that has overtones similar to the traditional qualitative research approaches mentioned above and uses similar methods and data analysis processes. For instance, in QD when analyzing data, we use an analysis approach from GT called *constant comparison*. This approach is the back-and-forth process between and across interviews to compare and contrast what is being shared. Similarly, as in ethnography, QD uses participant and environmental observation as an important and critical part of the data collection process. In QD, we also commonly interview and observe our participants in their natural settings. All of this is done to create rich, vivid descriptions of the phenomenon being studied with participant-guided interpretations of

the phenomenon. The major difference between QD and the other qualitative approaches just mentioned is that the QD end product results in a manifest (on the surface) description with minimal latent (interpretive) re-presentation of the data, so much so that the study participants readily understand the synthesis of data across interviews as it is re-presented into a new whole. It is not uncommon to hear participants during member checks, or other objective researchers after reading the article, say, “Oh yes, that makes sense.”

Along with QD being an efficient method in a descriptive study, it also has multipurpose uses. For instance, QD is commonly used in focus groups (Krueger & Casey, 2000) to inform and further develop behavioral interventions for potential recipients. In adapting a type 1 diabetes education intervention for grandparents that used human patient simulation, Maguire et al. (2015) utilized focus groups to determine if such an intervention would be useful and acceptable, and to investigate what specific grandparent education was needed. Based on the QD findings, the team then adapted and tested those findings in a feasibility study that also included post-intervention interviews.

QD is an especially useful approach when conducting community-based participatory research (CBPR). Bova et al. (2016) used QD in a CBPR study to describe HIV-testing attitudes, stigma, and access to healthcare among African-born men during a large soccer tournament. The QD findings from this study included the following: the need to (a) normalize HIV testing, (b) engage other community members in HIV screening

activities, and (c) develop public service announcements to increase HIV-related knowledge and testing, and reduce stigma. Additionally, the QD approach allowed the researchers to identify cultural strengths and assets in that specific community that could be used to support interventions in the entire African immigrant community. The findings from this study were used to guide programming and services provided by a nongovernmental agency that focuses on African immigrant health.

Another use for QD is developing measurement scales. We developed the Peer Mentor Support Scale (PMSS), a measure of peer mentor support for parents of children with T1D and youths with T1D (Sullivan-Bolyai et al., 2020). During the multistage development process, data from several QD studies were used as the basis for item generation. Cognitive interviewing using verbal probing (QD) was employed to refine the scale items. This iterative qualitative process can ensure refinement of scale items. The beauty of using QD for scale development is that you can use participants' language to develop the scale items, thereby increasing the likelihood that items will be more easily understood by future scale respondents.

Finally, QD can be used in metasyntheses and/or integrative reviews to synthesize the key messages of multiple qualitative studies. Since interpretation is limited in QD, it allows for the synthesis of existing empirical literature into usable material that can inform future practice and/or research (Erwin et al., 2011).

The Process of Doing Qualitative Description

This section describes the steps necessary to conduct a QD study. Much preplanning, thought, and detail go into the development and implementation of a qualitative study using QD. The first step begins with aligning the theoretical orientation with the exploratory research question(s).

Theoretical Orientation

The role of theoretical and conceptual frameworks in guiding qualitative research has been the subject of much debate. However, unlike some qualitative traditions (e.g., phenomenology), it is highly recommended that a theoretical or conceptual framework be used when designing and conducting a QD study. The use of a framework allows researchers to place their study findings within a larger context to help build the scientific knowledge on that topic (Anfara & Mertz, 2006; Miles et al., 2014). Typically with QD, a conceptual or theoretical framework is used to undergird or provide an initial place to start developing the questions and eventually the analysis process (Sandelowski, 2000). The chosen framework may be very specific to the phenomenon (Wu et al., 2016). For instance, when exploring how parents manage a child's day-to-day chronic condition, one might use the Family Management Style Framework (FMSF; Knafl et al., 2012) to begin the development of questions by focusing on the framework's three dimensions (definition of the situation, management behaviors, and perceived consequences; Hughes et al., 2015; Sullivan-Bolyai et al., 2016).

Middle-range and situation-specific theories are probably the most useful for conducting qualitative descriptive studies. Middle-range theories deal with specific phenomena, have a manageable number of concepts and propositions, and are amenable to empirical applications (Meleis, 2012). The beauty of using middle-range theories is that they provide a level of abstraction accessible to even novice researchers.

Situation-specific theories can also be useful but are limited by the fact that they are context-bound. Situation-specific theories arise from middle-range theories but focus on a highly specific situation or population. For example, Meleis's transitions theory (Meleis, 2012) is an example of a middle-range theory used to guide scientific inquiry on the human experience of going through various life transitions. From this work, several situation-specific theories have been developed, including care transitions (Geary & Schumacher, 2012), migration transitions for migrant farmworker women (Clingerman, 2007), and transition to adult day health services (Bull & McShane, 2008). The advantage of using these types of theories to guide QD studies is that they are accessible, quite specific, and pragmatic.

The use of a theoretical or conceptual framework in a QD study has five main functions:

- To guide the development of the specific aims and the content of the literature review
- To develop the qualitative interview questions
- To begin the analysis process
- To organize the study findings (if applicable)

- To evaluate whether the results are consistent with or different from the theoretical premises underlying the chosen framework

Sometimes the framework may not fit the data that are collected. If this happens, then the framework can be abandoned during analysis; however, the researcher should be sure to indicate in the discussion section of the paper the reasons the framework did not fit.

The language of the theoretical or conceptual framework should be used in the specific aims. For example, D'Esmond (2017) used QD to explore the distracted practice of various members of a healthcare team. D'Esmond used a conceptual framework based on the distracted driving literature that included the context, antecedents, stimuli, and consequences surrounding an event. These concepts were used in the specific aims, carried through to the description of the study findings, and evaluated within the discussion section of the paper. Ultimately, the conceptual framework was revised based on the data from this QD study.

Sampling Strategy

QD uses a purposive sampling strategy with maximum variation (Palinkas et al., 2015). Purposive sampling is a technique used in many qualitative designs to achieve a sample that includes ideal representatives from the target population. By ideal representatives, we mean that the study participants are chosen based on their ability to provide a detailed description of the phenomenon of interest. This requires investigator judgment when seeking those research participants who will be able to meaningfully and richly describe the experience under study. In addition to purposive sampling, QD

uses maximum-variation sampling, whereby potential research participants are recruited based on their ability to describe different types of experiences from various points of view. For example, in the D'Esmond study, the sample included nurses, physicians, and pharmacists who worked in different types of acute care settings (neonatal ICU, adult ICU, surgical floor, medical floor). Data were collected across all shifts on all days of the week and weekends.

Sample size requirements for QD studies typically range from 20 to 50 subjects, observations, or interviews, but considerable variation exists (Kim et al., 2016). The range can vary significantly however, depending on the topic and population under study (may be a small as 10 but at large as over 100). Although larger than many other qualitative traditions, a moderate sample size is needed to fully describe the phenomenon of interest, while providing for maximum variation to achieve data saturation.

The point of data redundancy is reached when researchers are no longer able to obtain new information, themes, or codes from the participant interviews and the findings are thought to be replicable (Guest et al., 2006), or when continued data collection results in diminishing return (Mason, 2010). In QD you are looking for an even balance between rich and thick data. Fusch and Ness (2015) describe rich data as the quality of data (layered, intricate, and detailed) and thick data as the quantity or amount of data (a lot of data). In QD, One option is to report the range and total number of pages of transcribed data you collected. However, the number of pages alone does not convey

the quality of the interview; that is determined by the richness of the descriptions shared in the results section

Data Collection

The investigator conducting a QD study has the goal of generating a rich and comprehensive descriptive data summary of the phenomenon of interest. The primary source of data comes from semistructured qualitative interviewing either in one-to-one interviews, dyad, group interviews, and/or focus groups depending on the purpose of the study (Willis et al., 2016). However, according to Sandelowski (2002), the use of observation, artifacts, and/or documents is also essential to gathering a rich description of the phenomenon of interest. We will discuss each type of data collection.

Interviews

As a starting point, open-ended questions, using the dimensions from a chosen framework, allow the interviewer to expand or narrow further questions or probes on the topic of interest depending on the response from the participants. Questions with probes tend to be more focused and multilayered versus one scoping question that may occur with phenomenology, for instance. An example of the interview structure associated with the framework concepts, questions, and probes is illustrated in Table 1. With QD, as in other types of qualitative approaches, questions may be changed or altered, omitted, or amplified with additional questions as one moves along the interviewing process depending on the information shared by the participants (Willis et al., 2016). For example, when interviewing fathers about the day-to-day management of a child with type 1 diabetes using an insulin pump, new information emerged about worries that

mothers had previously not discussed during their interviews (Sullivan-Bolyai et al., 2004). Thus, additional questions were added to the interview guide about this newly discovered management concern.

Types of interviews can vary with QD. Again, it depends on the purpose of the study, but one can conduct individual, dyad, family interviews, or focus groups. The interviews can be done face-to-face, over the telephone, or online. The length of QD interviews varies between 30 and 90 minutes depending on the topic, engagement, and reciprocity between the participants and the interviewer. In some cases, more than one interview may be needed. As with any type of qualitative approach, demonstrating a nonjudgmental and respectful interest in the participants' perspectives is very powerful and necessary for achieving rich descriptive responses. Choosing a quiet, private location that is convenient for the participant(s) is critical and requires careful planning. Interviews are conducted until informational redundancy is reached; that is, until no new ideas, perspectives, or information is shared (Sullivan-Bolyai et al., 2005). Practicing the interview process before the first interview is also essential to implementing a natural unforced dialogue. Feeling comfortable with the questions will help the interviewee feel more relaxed and allow a reciprocity of active listening on the part of the interviewer, probing (vs. prompting/leading) as a strategy of interest and curiosity. The transcript of the interview should reflect very little dialogue from the interviewer (Hint: Make sure to review the first few transcripts with an experienced colleague to help improve your interviewing technique). Being engaged in what the interviewee is saying is critical to establishing trust. The interviewer also should be aware of how one responds nonverbally to comments heard during the interview. Nonverbal judgement can

sometimes give cues without one even knowing it; so again, practicing the questions and thinking about how one would react based on the questions is critical.

Audio recording the interviews is required to facilitate full engagement of the interviewer with the interviewee. It is also recommended that you use two audio recorders in case technical problems are encountered with one of them. Distractions like cell phones, other family members in the home, and/or multitasking should be minimized to allow for thoughtful responses to the open-ended questions asked by the interviewer. Field notes framed by simple organizing questions such as *What I did, What I saw, What I felt* is very helpful to remind the interviewer of the context beyond just the responses to the interview. Field notes must be recorded concurrently or immediately after each interview using written notes or audio recordings. These field notes are later incorporated into the typed transcripts to add richness and context to the data. Needless to say, all of these details must be well thought through in the data collection planning phase of the study development.

Table 1
Framework Concept, Question, and Probes for QD Interview

Framework Concept	Open-Ended Question	Tentative Probe
Behavior management	Tell me a bit about a typical day of diabetes management for [insert child's name]	Tell me more: Who helps you with each of these tasks? Is it different on weekends?
Perceived consequences	How do you see [insert child's name] future with healthcare needs moving forward based on how you manage his T1D now?	Tell me more: When do you think you will begin transition of his care? What kinds of resources might he need that you will put into place before he takes on his self-management?

Observation

Another essential part of the QD approach is collecting observation data. This process can involve informal observations, such as recording participants' nonverbal behaviors and/or interactions, or it can involve formal observations using structured observation forms. For example, D'Esmond (2016) observed nurses, doctors, and pharmacists in their typical work environment, using a structured observation form to record distractions that occurred in everyday practice. These data were then combined with interview data to form the basis of a preliminary model of distracted practice.

To paraphrase Sandelowski (2002), using only interviews without using other data collection sources such as observation is trying to steady a *one-legged stool*, versus the additive contextual richness of participant observations that further add to the description. Documenting nonverbal responses such as lack of eye contact, nervousness, and crying are all important information to record in your field observation notes. For instance, when interviewing mothers raising a child with T1D, every one of the mothers cried when describing the time of diagnosis. Fathers exhibited sadness also describing the diagnosis. Observations are especially useful with dyadic or family interviews (Willis et al., 2016). For instance, Barnard's feeding and teaching observation tools (Barnard & Kelly, 1995) were used by Sullivan-Bolyai et al. (2003) for documenting parent-child interactions around T1D management behaviors in a mixed-methods study. Those observations added important contextual information to describe mothers' experiences raising a young child with T1D. Mothers were observed to be highly skilled in reading their child's subtle behavioral cues that suggested changes in blood glucose

levels. Thus, this observational data added rich and important information to the final analysis.

Artifacts and Documents

The QD phenomenon can be illustrated or better explained by using artifacts (manmade items such as healthcare equipment) and/or documents such as healthcare education materials, or records, photos, poetry, calendars, and/or diaries. An excellent example is mothers raising young children with T1D who have shared (with coauthor SSB) all this additional *data* to underscore the experience of managing the care for a child with T1D. For instance, several mothers showed SSB their photo albums during their child's hospitalization associated with the diagnosis, as well as diaries they kept that gave them a running timeline of how management moved from strict to more flexible care (Sullivan-Bolyai et al., 2003). Diabetes equipment like the continuous insulin pumps or travel snack packs were shared as artifacts with the interviewer as integral parts of the day-to-day management. All these pieces of data helped the interviewer better understand and describe the phenomenon in rich detail.

Data Order

The order of data collection is another important issue to consider if you are collecting both qualitative and quantitative data, especially when using QD, where ideas or words introduced by a self-report questionnaire or survey, if administered prior to the interview process, could potentially influence the participants' language or responses (Deshefy-Longhi et al., 2009). Since QD is focused on a tentative truth through the eyes of the participants, it is critical to ensure that other influences such as words, concepts, or

thoughts introduced in a questionnaire don't threaten the internal validity (i.e., testing, history, and/or maturation) of the study findings (Deshefy-Longhi et al., 2009). Thus, carefully thinking about the order of data collection is necessary in both the planning phase of the study and in the written final report. [Hint: It is important to indicate your choice of data order in any publications using QD]. Providing a transparent rationale for the chosen data collection order allows for future replication of the study.

Qualitative Description and Rigor

It is essential that researchers outline the approaches they use to ensure the rigor of their study design and results (often referred to in quantitative research as reliability, validity, objectivity, accuracy, and generalizability). Lincoln and Guba (1985) discuss these criteria in terms of *trustworthiness.* These criteria include *credibility* (ensuring internal validity), *transferability* (external validity or generalizability), *dependability* (reliability), and *confirmability* (objectivity and reflexivity). For the purposes of this guide, we will use these same criteria.

Credibility is the process of making sure that the study findings represent what they are supposed to represent; in other words, the findings as described by the researcher are believable and are close to reality (similar to internal validity in quantitative research). This is established when doing a QD study by the following:

- prolonged engagement,
- excellent interview techniques,
- observation (in addition to interviewing),

- triangulation,
- peer debriefing,
- conducting member checks.

Transferability is the extent to which the study findings may be applicable in other situations; it is often called generalization of research results (like external validity in quantitative research). Although often mentioned as a component of trustworthiness, transferability is limited in qualitative research. Because purposive sampling is used (as opposed to a random sample in quantitative research), the findings are typically only transferable to the study participants or those with characteristics very similar to the study participants. However, it is important to provide enough contextual information about the study participants and the setting to allow others to consider the study boundaries.

Dependability refers to how reliably the data are collected and presented. In other words, would someone else analyzing the data arrive at similar findings? A detailed audit trail that specifies the criteria used to make coding or analysis decisions is needed to provide transparency throughout the study. Researchers demonstrate dependability by describing in detail the following via the audit trail:

- The processes that occurred within the study (planned research implementation).
- What was changed and why.
- How data were gathered and what changed in the field.
- Reflections on the research process—what worked well and what didn't).

Confirmability is the process of making sure that the results of the study are based on the experiences of the study participants and not the preconceived notions, personal experiences, or biases of the researcher. Confirmability in this context is like the idea of objectivity in quantitative research or the processes put in place by the researcher to avoid bias. In QD, confirmability is closely aligned with the idea of reflexivity.

Reflexivity has different meanings depending on the context. In QD research we refer to reflexivity as the cognitive processes that researchers undertake to make explicit their personal connections, beliefs, values, perspectives, and experiences (potential biases) related to the topic of inquiry. The extent to which qualitative researchers are transparent about their potential biases is an important criterion for evaluating confirmability.

An *audit trail* is the critical process used by the researcher to track all decisions made along the way of collecting and analyzing the data. The audit trail is a window into the researcher's mind and is often used to evaluate both the dependability and confirmability of study findings. The audit trail allows other researchers to evaluate the extent to which good research practices were followed throughout the conduct of the study.

Data Management and Analysis: Two Distinct Actions

Data management and analysis are two distinct components of QD. Thus, we will discuss them as separate, albeit iterative, actions when working with qualitative data.

Data management involves the precise preparation of the qualitative dataset (including field notes, observations, and artifact documents) for the data analysis phase of the study (Willis et al., 2016). This component includes having an experienced transcriber to turn the audio recording into a written document that can be uploaded into a software program for analysis. Professional transcribing services are available that can quickly and accurately provide the transcription back to the researcher for review and analysis. Depending on the topic, ensuring that the transcriptionist has the opportunity to debrief especially with sensitive topics should also be considered (Kiyimba & O'Reilly, 2015))

Data management also includes listening to the original recordings to ensure accuracy, as well as correcting the transcripts to avoid erroneous or missing data. A decision needs to be made about which software program you will use to store and organize the different types of data you are collecting (Atlas, NVivo, MaxQDA, etc.). Many of these software programs allow uploading and storage of the other documents one has collected in the study including field notes, observations, photos, diaries, etc. The basic rule of thumb is to remember that secure storage and retrieval are of utmost importance.

Secure storage implies that all data are stored only on encrypted devices, that a password is required to access the data, and only a limited number of people have access to the password. Best practice is to store data in the cloud or on a backed-up HIPAA-compliant server, rather than on a mobile device, which is subject to theft and loss. However, if you store data on a mobile device temporarily while in the field—such as a laptop or tablet—the device must be encrypted and password protected and it is best to include a program that would allow you to remotely erase all data from the device. It is also important to recognize that voice recordings are considered "identifiable data." Therefore, voice recordings must be stored in a secure location with limited access. [Hint: Documents that link any of your data to the study participant's name or identifying information should be kept locked and separate from the transcripts or any other data you have collected].

The QD data analysis process uses either qualitative content analysis or thematic analysis (Braun & Clarke, 2014; Hsieh & Shannon, 2005; Kim et al., 2016; Miles & Huberman, 1994; Willis et al., 2016). Each of these will be described below. The goal for the analysis process is to identify key common content ideas and perspectives within the participants' responses to questions and form rich, clear, coherent descriptions associated with the phenomenon across all the interviews.

Qualitative Content Analysis

Kim et al. (2016) reported, in their systematic review of 55 QD studies, that all studies used an inductive approach. However, the type of analyses used in these studies varied as follows: 54.5% used qualitative content analysis; 25.5% used thematic analysis; 11%

did not specify the analysis method used; and 9% used constant comparison. Consistent with Kim et al.'s systematic review, *qualitative content analysis* is the most used QD analysis technique.

Hsieh and Shannon (2005) further divided qualitative content analysis into three multilayered analysis approaches whereby, depending on the study questions, one may choose a conventional, directed, or summative approach. The conventional qualitative content analysis approach is used to describe a phenomenon of interest with no preconceived labels, allowing the themes to emerge from the data. Those themes are later compared to other existing themes. Directed qualitative content analysis uses existing theories or known concepts associated with a phenomenon of interest, thus ensuring a more structured process and restricting the findings. Finally, the summative qualitative content analysis approach uses keywords associated with the phenomenon in the empirical literature, and one searches for the use of these words, sometimes counting the number of times they are used in the transcripts. Thus, the three types of approaches are differentiated by how the initial codes are derived. It is important to report which type of content analysis you used in any publications.

Thematic Analysis

Thematic analysis is defined as finding, analyzing, and describing themes or patterns within the interviews (Braun & Clarke, 2006, 2014) and was also reported as an analysis approach in Kim et al.'s (2016) review. For those of us working in healthcare, it is a very complementary, pragmatic analysis approach to analyzing data. Thematic analysis *fits* with the earlier description of QD analysis process as well (Willis et al., 2016). It

captures themes that are defined as rich descriptions of patterns of information identified within the dataset. It can also capture perceptions and basic meanings with the data. Re-presentation of qualitative descriptive data typically is at a manifest level versus the more interpretive, latent level (Braun & Clarke, 2006). Manifest (explicit) level is a rich surface level description of patterns or perceptions that have emerged from the dataset. Latent (implicit) level analysis uses more interpretation to discover an underlying meaning of a phenomenon. Both levels require an iterative process with several steps. For instance, mothers described the day-to-day work of managing a child's T1D as requiring constant vigilance (manifest; Sullivan-Bolyai et al., 2003). A few mothers also expressed that the diabetes (continually referring to it as "it") was really their disease but resided in their child's body (latent meaning). However, the meaning of ownership of the disease was not further explored in this QD study as it would have been with an interpretive approach such as phenomenology.

Analysis Process

Regardless of whether one uses qualitative content analysis or thematic analysis, data analysis begins with the completion of the first interview using the following process:

- The transcript is reviewed against the original recording for accuracy.
- The transcript is uploaded into the software program.
- A general summary of each interview is completed and stored to get at the gestalt of each experience.
- Preliminary investigator's ideas and thoughts are documented in the audit trail file.

- Next, chunks of data are coded. These may be a complete thought covering several paragraphs or they may be only a few sentences. For instance, coauthor SSB noticed that mothers referred to their child's diagnosis as *it,* so this was noted for further perusal within the other interview transcripts (Sullivan-Bolyai et al., 2003).
- A label for the initial organization of codes may come from the framework, or it might be an idea embedded within the chunk of data. At this early point, nothing is permanent.
- The process is very dynamic, a back-and-forth between analysis and interviewing continues until all interviews are completed.
- New questions may be added based on the analysis of that first interview, moving on to the next interview with perhaps a different perspective based on the information shared.
- Each interview informs the next. Therefore, it is best to only do one or two interviews on the same day so information can be digested, mulled over, reviewed, and coded before moving on to the next interview.
- The process continues with reviewing and researching for thematic ideas.
- Once the iterative process *feels exhausted,* themes can be defined and named (Braun & Clarke, 2006; Saldana, 2013). There probably will be variation in these themes; for instance, coauthor SSB found that *constant vigilance* was emotionally felt by all mothers raising a child with T1D, yet some defined it as a *24-7 job,* while others saw it as less time-consuming.

Thus, the rich description captured this variation across mothers (Sullivan-Bolyai et al., 2003).

- Typically, if one has really dug deep to rebuild the data into themes and subthemes, two or three major themes will emerge from the focused phenomenon explored, with perhaps a few subthemes that are subsumed under a major theme. For instance, *parent management concerns* were an overall theme with subthemes that focused on individual but related concerns with hypoglycemia, others caring for the child, and long-term complications. Occasionally an overarching theme may emerge—the pinnacle of the findings with subthemes as part of the overarching theme all interrelated and threaded together. For instance, the overarching theme of *constant vigilance* was a concept identified that defined everything related to managing a young child's T1D. Whether it was the day-to-day management, the concerns, family life, it all had to do with the parent's constant work 7 days a week to keep their child healthy.

The original undergirding framework used may or may not move forward depending on the analysis outcomes. Sometimes findings may fit. For instance, Raymond (Raymond et al., 2017) interviewed parents of adult children with serious mental illness. She used the FMSF and focused some of her questions on the associated components. The results after analysis further supported the usefulness of *fit* with the framework. In contrast, findings may not coincide with the framework. In this case, it is important to avoid "force-fitting" data to artificially link findings with the framework; instead, the researcher needs to be true to the data and re-present the findings as they exist and

consider describing the plausible reasons for the poor fit of the findings with the original framework in the limitations section of any publication.

The analysis process with QD should not be conducted in isolation. It is important to have other (at least two) objective qualitative experts review and critique the emerging themes and descriptions to ensure they are clear and make sense. Being transparent with the findings and considering other perspectives will only help ensure you are staying close to the data and not reading more into the data (higher level of interpretation) than what is there on the pages. We call it “reading more into the data” when a researcher suggests that the data reflects more than what was conveyed by the study participants and jumps to global conclusions without data to support the assertion. This is a common problem with novice researchers. You can tell if you are doing this by carefully examining your data and conclusions; if you are unable to directly link quotes or data to your themes, then you may be reading more into your data. This process will be part of the trustworthiness section of the study. Your goal is to reach descriptive validity (the participants’ accurately presented perspectives) and interpretive validity (meaning to the phenomenon from the participants’ perspectives). Simply put, meaning in QD is described as the obvious (Graneheim & Lundman, 2004).

Results and Re-Presenting Findings

The QD analysis process involves breaking down all the interviews and rebuilding them into a new whole (Knafl & Webster, 1988). The findings should be a new clear and rich description of the phenomenon of study. The rich description should also be transparent

and balanced. This means that the rich description and quotes offered in the published findings are clear and unambiguous but also represent variation in the ideas shared by the participants.

Once the findings are completed and ready for critique, using member checks (as described earlier under credibility) to clarify, corroborate, and validate results can be applied. Member checks are a process of going back to the study participants with a good draft of the study findings (typically in one or two pages when possible) to ask them how well this descriptive summary represents their experience. This is typically done with three–five individuals who were purposively selected based on their ability to give you an unbiased view of your descriptive summary. If the member checks reveal discrepancies in your interpretation, you can either revisit your data analysis to confirm or revise your findings or conduct additional interviews, purposefully selecting research participants who are uniquely qualified to shed light on the issues that arose in the member checks. However, overall discrepancies are limited with QD since the analysis goal is to stay close to the data, reflecting the spoken word of the participants. Another safeguard to overreaching in interpretation is the use of maximum-variation sampling. Nevertheless, minor alterations may occur and should be acknowledged, documented, and reported in the final dissemination document.

One issue that comes up in QD is whether one should count the qualitative data (often called quantitizing). Opinions vary on the value of providing numbers of participants who shared similar experiences (Maxwell, 2010; Sandelowski, 2001; Sandelowski et al., 2009). Publishing these participant numbers is often dependent on the journal

requirements but also on the overall sample size of the study (i.e., using percentages with a small group of participants is not recommended because it can be misleading). Our sample size numbers in QD are more moderate than small, so although there may be a compelling statement in an interview, knowing that it wasn't common among the overall sample size places the specific experience in context. Sandelowski (2001) recommends avoiding verbal uniting like *most, many, sometimes*. One can use the actual number (n = 4) of how many participants experienced something, while specifying the number of participants who experienced another situation. Sandelowski recommends using a table to illustrate this type of quantitative data. She also suggests providing a key to define terminology such as **few*," with a footnote that defines what few means (i.e., less than 3 participants). This approach is very transparent without moving away from the gift of context that qualitative research affords us; it is also useful for researchers when they conduct metasynthesis studies using qualitative data.

If the sample size is large enough, situations occasionally warrant the use of numbers if that use underscores the meaning or the strength of the theme. For instance, all the mothers in a qualitative study (N = 28) remembered the exact date, time, and place when they heard their child was diagnosed with T1D (Sullivan-Bolyai et al., 2003). That fact strongly illustrates the emotional devastation of the event. Our position is that including the number of times a theme or key data are represented by the data is a helpful practice when doing QD; it assists with the conduct of metasynthesis studies and depicts the frequency with which a theme or idea was expressed by the study participants.

Operational model diagrams that display and illustrate the findings are also helpful in QD. Miles et al. (2014) highly recommend visuals to help the reader see how themes and concepts are connected. An illustration of this visualization is seen in a QD study by Sadlon et al. (2020): Figure 1 (p. 600) illustrates the link between the study aims, themes, and concepts of interest in the theoretical framework (PEN-3 model).

Evaluating Study Quality

To assess the quality of a QD study, one must examine how well the researcher did at (a) recruiting, (b) interviewing, (c) collecting data, (d) achieving data saturation, and (e) synthesizing data into an understandable whole. For years, many researchers have used the trustworthiness criteria outlined by Lincoln and Guba (1985). Although this process may be applicable to QD studies, the simplicity and directness of QD call for evaluation criteria that are also simple and direct. Table 2 outlines these criteria.

Table 2

Evaluating Quality in QD Studies

Markers of study quality	How to determine when it is present?	How to determine when it is lacking?
Successful recruitment	• Detailed description of the desired and achieved purposive sampling criteria (including maximum variation criteria) • Clear and reflective description provided if the achieved sample does not match the desired criteria	• Cross-sectional or convenience sample • Minimal variation in sample • No description of planned sample, purposive criteria, or maximum variation criteria are present • No explanation provided for why the desired and achieved sample criterion do not match

Competent interviewing	• Description of the desired and achieved length of interview sessions • Description of the length of transcripts • Discussion of any problems with interviewing procedures or data recording • Description of the balance between rich and thick data present in the interviews • Reflective description of what this means for study findings	• No details about the length of the interviews • Very short interviews (e.g., <30 minutes each) • No description of the length of transcripts produced • No discussion of problems or issues with interviewing procedures • Lack of balance between rich and thick interviews
Comprehensive data collection	• Description of desired and achieved type of data collected • Description of problems with data collection (transparency criteria) • Reflective description of what this means for study findings	• Lack of description about the different types of data desired and achieved • No explanation provided when data were not collected as planned • No discussion of participant observation
Data saturation	• Description of how the researcher determined that data saturation had occurred (i.e., no new information, themes, or codes were derived) and when continuing to collect, data resulted in diminishing return (including descriptions of how many additional interviews were conducted) • Member checks (when were they done and what was the result?)	• No or weak description about how data saturation was achieved • No confirmatory interviews performed or described • No member checks performed or described
Synthesis of data	• Data are represented as a unified whole, using participant language when possible • Quotes are used judiciously to illustrate the main findings • Findings are linked back to theory or framework perspectives	• No unified whole is present • Lists of subject quotes without a clear linkage to the major themes • Lists of data categories only • No attempt to link findings with theoretical or framework perspectives

QD Challenges

Several challenges associated with doing a QD study must be considered. First, researchers may not achieve maximum variation sampling because of issues beyond their control. For example, a researcher may find that they need to explore a certain theme further in subsequent interviews, but they are unable to locate or recruit informants willing to participate in the study who have that experience (i.e., recruiting hard-to-reach populations). In this case, it is important to describe in any publication how this limitation may affect the interpretation of the study findings. Second, a tendency exists for some researchers to “close down” the analysis too soon. In other words, the researcher fails to conduct multiple looks at the data (both within and across interviews), leading to reports with a laundry list of quotes, and too many categories or themes that, quite frankly, lack synthesis and do not portray a cogent whole. One way to avoid this is to work with a team of researchers (multiple coders/analysts) to achieve consensus. [Hint: It is also helpful to elicit the help of someone not involved in the study to perform a critique on the written analysis midway through the process]. It is our experience that it often takes three to four “good” written versions of the results before an experienced qualitative researcher gets it right (a novice researcher may end up with twice the number of written versions before achieving a synthesized description). Lastly, there is the tendency of trying to force-fit data into some preconceived notions of the experience or problem or trying to make the data fit the framework. One way to avoid this problem is by steering clear of the tendency to study problems that you have intimate experience with and therefore may be too enmeshed in or biased to see the data for what it is (lack of reflexivity). Another recommendation is to analyze the data

“as it lies” and try not to force it into the framework during the first pass at data analysis. Instead, examine the congruency of your findings with the framework as a later step in the analysis process.

Conclusions

In sum, doing QD requires a delicate balance between planning, executing, interviewing, data management, and analysis. It is an iterative process that requires constant re-examination of how you are conducting the study, what you are thinking about, and what the study participants are saying to you, and how they are behaving. It is important to constantly ask yourself the following questions as you conduct your study:

- Are my interviews open and responsive to the study participants?
- Do I understand what the participants are saying?
- Can I re-present what the participants are saying in a way that stays true to their experience yet makes sense for others?
- Am I seeing the whole picture?
- Am I interjecting my own beliefs/perspectives into the analysis process?
- Am I being transparent about my pre-study beliefs, values, and experiences with this topic or population?
- Am I digging deep enough into participants’ responses?
- Do I need to revise my interview questions and continue interviewing to get at a certain topic?

- Do I need to revise my purposeful sampling strategy to make sure I am speaking with the best informants about the issue at hand?

QD is a highly valued, pragmatic qualitative approach for those working in the healthcare field that helps the researcher “get at” the contextual perspectives of the experience. Based on these descriptions, one can more easily understand the experience from a human-to-human perspective. That alone can better inform patient-family-healthcare provider interactions; it can allow adaptation of treatment and resources, and potentially relieve anxiety and suffering and promote healing. This qualitative information can be used to inform future targeted behavioral and/or educational interventions that can be used by others experiencing the phenomenon. It can also be used to make more finite measures to quantify the phenomenon in the real world. The lack of a high level of interpretation with this qualitative approach reveals the experience to those trying to better understand the phenomenon on a human level. That is at the heart of what we should be doing as professional nurses.

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