A Pragmatic Guide to Qualitative Analysis for Pediatric Researchers

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Title page

A Pragmatic Guide to Qualitative Analysis for Pediatric Researchers

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Word count – 8025 (excluding abstract and key words, but including manuscript, internal citations, tables, reference list)

Total page count (title page – references) – 29

Abstract (153 words)

Objective To describe four approaches to qualitative analysis in order to provide a pragmatic, application-oriented guide to their use in research focused on children and their families. **Methods** Four commonly used approaches to qualitative analysis - framework analysis, rapid qualitative analysis, content analysis, and reflexive thematic analysis - are described and compared, including their analytic strategies, tips for use, terminology, and application to a hypothetical example. **Results** A pragmatic guide to each method is provided as well as examples of how each analytic approach could be utilized to analyze the same dataset. **Conclusions** A variety of approaches to qualitative analysis are available to both the novice and experienced qualitative researcher. The approach selected from the options presented in this paper will depend on numerous factors, such as the clinical problem being explored, research context, aims, objectives and research questions, resources available such as time and funds, and the qualitative expertise of the team.

Key words: Qualitative, Analysis, Pragmatic

Introduction

Qualitative research has been defined as "an iterative process in which improved understanding to the scientific community is achieved by making new significant distinctions resulting from getting closer to the phenomenon studied" (Aspers & Corte, 2019, p.130). In recent decades, qualitative research methods have been increasingly used by pediatric psychologists and other pediatric-focused researchers to examine how children and their families experience and respond to health-related challenges. For example, while this is not an exhaustive list, qualitative methods are now used by pediatric researchers to: inform the development of research directions or interventions (Akard et al., 2013), evaluate ongoing assessment and intervention efforts (e.g., process evaluation, intervention evaluation) (Schneider et al., 2009), and inform program implementation or expansion of research (e.g., dissemination and implementation efforts, extending interventions to new populations) (Lyon et al., 2014).

These qualitative approaches, when used in multimethod or mixed method research, complement quantitative methods by adding insight not readily available through quantitative research. While quantitative research can provide an objective assessment of intervention outcomes, qualitative research offers deeper insight into individuals' perspectives regarding a particular topic or experience, such as the impact of an intervention on daily life, the role of family functioning in intervention outcomes, or a child's experience of living with a chronic health condition (Chamay Weber et al., 2016; Mooney-Doyle et al., 2018; Pierce et al., 2017).

Qualitative research methods have clear strengths and utility within the context of pediatric research; however, psychologists and other clinical researchers, particularly

those newer to qualitative research, may face challenges when implementing qualitative analytic methods. Qualitative methods (data collection and analytic approaches) have progressed tremendously over the past few decades and some, such as interpretive phenomenological analysis (IPA), have been advanced and published within the field of psychology (Creswell, 2013; Mant et al., 2019; Smith et al., 2022). Other methods such as rapid qualitative analysis, however, have not been as accessible to novice researchers within the field, particularly those with limited exposure to qualitative methods during formal training. Researchers newer to qualitative methods may find it challenging to select a qualitative analytic strategy that best addresses their research question. The qualitative methods literature also uses its own terminology (e.g., codes, themes), with terms sometimes defined or operationalized differently across approaches. This may lead to confusion among researchers who were not trained in the qualitative tradition.

As a result, the goal of the current paper is to provide a summary of key qualitative analytic techniques that may be unfamiliar but potentially useful to pediatric researchers, thus enabling them to expand their toolkit of qualitative analytic approaches. This paper builds on and expands our prior publications where we provided *Journal of Pediatric Psychology* (JPP) readers with a broad overview of qualitative (Wu et al., 2016) and mixed methods (Wu et al., 2019) research. In this paper, we continue this series of papers by providing an introductory overview of select analytic approaches which may be particularly useful to pediatric behavioral researcher and that would accommodate varied research questions, the availability of resources, or which may not have been operationalized as intended by the method's developers. In addition, research teams vary in terms of the expertise of team members and the

availability of resources, and we purposely selected approaches that would accommodate the needs and composition of diverse teams.

The analytic approaches described and discussed in this paper are framework (Ritchie et al., 2014; Ritchie et al., 2003) , rapid qualitative (Holdsworth et al., 2020), content (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005), and reflexive thematic analyses (Braun & Clarke, 2006; V. Clarke, Braun, Terry, et al., 2019). We included approaches consistent with the naturalistic paradigm and its emphasis on meaning and contextual understanding (Ambert et al., 1995; Guba & Lincoln, 1982), rather than those based on a specific philosophical tradition such as symbolic interactionism or phenomenology. Content analysis and reflexive thematic analysis are well established approaches used by investigators in multiple disciplines, including psychology. Framework analysis and rapid analysis were developed more recently and are excellent options for studies focusing on policy or intervention development. Other commonly-used qualitative methods not described in this paper include the aforementioned IPA (Creswell, 2013), grounded theory (Corbin & Strauss, 2015), discourse analysis (Potter, 2003), conversation analysis (Silverman, 1998), and narrative analysis (Wong & Breheny, 2018). Above, we included key references for each method to direct readers interested in more information about these methods.

In this paper, we take a pragmatic approach to qualitative analysis, which we see as aligned with the types of research often conducted by pediatric researchers. In our experience, the selected analytic approaches are well-suited for pragmatic application and can be used to address a broad array of research questions. We first describe the types of data used in qualitative analyses, and basic assumptions for qualitative analytic

methods in general. Next, we describe the four qualitative analytic approaches. To illustrate the use of these four approaches, we provide an example of how each could be applied to a pediatric behavioral research topic, i.e., an investigation related to an obesity intervention for children. And finally, we provide suggestions for how researchers can select a qualitative analytic approach that best meets their needs.

Data Types Appropriate for Qualitative Analysis

In addition to interview and focus group data, many different types of data can be analyzed using the analytic approaches described in this paper. These include diary entries (Mickelson et al., 2021); story completion tasks (V. Clarke, Braun, Frith, et al., 2019; Whitty, 2005); images from participant-created collages (Borraccino et al., 2019); drawings and photographs obtained through art-based approaches (Clark et al., 2019); and newspaper/magazine articles (McIntosh, 2000). Qualitative analytic approaches have also been used to analyze social media posts (Anderson & Clarke, 2019) and tweets (Chilman et al., 2021). Further, qualitative data can be intentionally integrated with quantitative data in mixed methods designs (Creswell et al., 2011; Pierce et al., 2017; Wu et al., 2019). For a more detailed exploration of the types of data that can be analyzed qualitatively, interested readers are referred to Braun, Clarke, and Gray (2017).

Basic Assumptions

As a science, psychology has an interest in justifying claims about the nature of knowledge (epistemology) and appropriate methods for generating knowledge (Ambert et al., 1995; Guba & Lincoln, 1982). Though not an all-inclusive list, basic assumptions underlying the qualitative research paradigm are identified to facilitate understanding of

the approaches that we describe (Creswell & Poth, 2018; Paterson et al., 2003). While the analytic approaches included in this paper differ in their epistemologies based on nuanced variations in philosophical assumptions about data collection, analysis, and interpretation, they share basic assumptions about the generation of knowledge consistent with the naturalistic paradigm. We chose to emphasize the application of each approach rather than their philosophical underpinning or associated research designs. We refer the reader to our previous two papers addressing qualitative (Wu et al., 2016) and mixed methods (Wu et al., 2019) research where we address issues such as research design.

First, investigators' beliefs about a field of study shape important aspects of their research, which may have the unintentional side-effect of inhibiting the development of a more dynamic, comprehensive understanding of the topic under investigation. Second, it is assumed that by interacting directly with participants and intentionally trying to minimize the distance between researchers and participants, qualitative researchers using methods we describe achieve a deeper, more nuanced understanding of their subject matter. Third, during analysis, categories of interest may be grounded in the data (inductive analysis) or may be guided by an existing framework (deductive analysis); this is discussed further within our description of each approach to qualitative analysis.

Terminology

Like any field, qualitative analysis comprises key terms used to represent important thoughts and ideas. In Table 1, we present terminology underpinning the four approaches presented in this paper to help ensure comprehension. However, it is

important to acknowledge that the precise definition of these terms may vary by analytic approach. Therefore, we strongly recommend investigators considering a qualitative project be familiar with qualitative research and include an expert on the research team with mastery of the selected analytic approach gained beyond graduate training (Polkinghorne, 2010).

[insert Table 1 about here]

Recommendations for Selecting a Qualitative Approach

Although there is no strict guideline for selecting which analytic approach to use for a particular dataset, below we offer recommendations for conducting a successful analysis, indicating the approaches to which they apply (Table 2).

[Insert Table 2 about here]

Analytic Approaches

The four analytic methods we focus on are presented below.

Framework analysis was developed in an applied research context to systematically manage qualitative data with the goal of identifying potential for actionable outcomes (Ritchie & Spencer, 1994) by providing transparent results and conclusions that can be related back to the original data (Ritchie et al., 2003). Framework analysis may be undertaken both during and after data collection and allows for flexibility and easy retrieval of data to show others how decisions were derived (Swallow et al., 2003).

The framework analysis process includes five interconnected stages: (i) familiarizing (immersion in data by listening to taped interviews, reading transcripts, listing key ideas/recurrent themes); (ii) identifying a thematic framework (i.e., decide on

a framework – deductive (e.g., based on theory), inductive (e.g., based on study data), or a combination of both deductive and inductive, which provides a mechanism for labelling manageable data bites or themes into a framework for future retrieval); (iii) indexing (developing a coding frame of key themes based on the data, entering short summaries into the coding frame with the page number of the original data excerpt for easy retrieval later); (iv) charting (entering themes into a matrix using columns (e.g.. themes) and rows (e.g., participants) for reducing data into a short description of the participant's data to retrieve it for further analysis); and (v) mapping and interpretation (comparing and contrasting respondent accounts, searching for patterns, and seeking explanations for patterns in the data).

The inter-related but distinct stages of analysis allow for theme-based or case-based analysis, or a combination of the two, through the development of charts that may be read across (cases) or downwards (themes). This approach also enables analysis of individual but linked studies to be examined separately and then combined to identify cross-cutting themes (Furber & McGowan, 2011).

Dixon-Woods (2011) recommends the use of charting in framework analysis for assisting with transparency and team working. Charting also enables investigators with competing responsibilities (e.g., running a clinic) to easily pause the analysis and return later to continue where they left off. It can also be useful when more experienced investigators are supporting those new to qualitative research because it provides a clear audit trail of how data moved from interview to transcripts to themes, with summaries in charts enabling researchers to discuss ideas. Additionally, it permits researchers and service users to work together to consider a study's progress (Furber

et al., 2009) and provides an audit trail for health-care professionals; this in turn strengthens the trustworthiness and dependability of conclusions. For more information on framework analysis, we refer the reader to these resources: Ritchie & Spencer (1994), Ritchie et al. (2003) and Ritchie et al. (2014) and an example of its application (Swallow et al., 2016).

Rapid qualitative analysis employs participatory strategies, such as stakeholder involvement, team collaboration, and a rapid cycle of data collection and analysis to produce actionable results (Holdsworth et al., 2020; Vindrola-Padros & Johnson, 2020). Rapid qualitative analysis is distinctive in that it is not linked to a particular qualitative approach (e.g., content or thematic), but some approaches may be more easily streamlined in the rapid timeline of this approach. Rapid qualitative analysis incorporates cost-effective tools such as templated matrices that are used in ongoing analyses when results are needed to quickly inform next steps in research (Kirk et al., 2016). (See Supplementary Data-Table 1). Rigorous applications of this approach have been shown to produce valid findings compared to traditional in-depth, line-by-line analyses (Gale et al., 2019; Nevedal et al., 2021) and save time and resources. While traditionally used in implementation science, rapid qualitative analysis can be adapted for use in other research when pragmatic options are needed for producing timely and contextually rich evaluative information.

Rapid qualitative analysis typically includes specific plans for data gathering (often involves both qualitative and quantitative data and multiple stakeholders), data management and analyses, and dissemination of results. Data are gathered electronically via databases for quantitative data and audio and/or video software for

qualitative data. However, data may not be transcribed and analyzed in qualitative analysis software as typically done with other approaches. Instead, interview notes can be taken from electronic recordings by the analyst in Excel matrices which are pre-populated with codes and sub-codes that correspond to the study's conceptual framework and other items tailored to the project to deductively begin analysis. Codes may also be added inductively if evidenced in the data. For example, with implementation science projects, the Consolidated Framework for Implementation Research [CFIR] 2020 (CFIR Research Team) or the RE-AIM Framework (Reach, Effectiveness, Adoption, Implementation, and Maintenance Framework [RE-AIM]) (Glasgow et al., 2019) may be used as an organizing framework guiding the analysis. The matrices congregate and arrange the data to allow for comparison across all cases (e.g., stakeholders, sites) or within cases (Miles et al., 2014; Saldaña, 2013). The original codes and sub-codes can then be amended based on ongoing data analysis. Alternatively, any combination of procedures (i.e., qualitative software packages, transcription) could be used in rapid qualitative analysis to establish a systematic plan and timeline for rapid cycle of data collection and analysis (Holdsworth et al., 2020; Nevedal et al., 2021).

Another distinctive aspect of rapid qualitative analysis is that coding is often done in teams of primary and secondary analysts who also collaborate on double coding a sample of the data, discussion and resolution of discrepancies, and consultation with the study team (Nevedal et al., 2021). For more information on rapid qualitative analysis, we refer the reader to these resources: Beebe (2014), Gale et al. (2019) and Geng et al. (2017).

Content analysis encompasses a group of approaches used to develop a condensed description of a set of text data that is reported as categories, themes, or patterns (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005). Content analysis can be used to address diverse research aims and is applicable to multiple forms of text data (e.g., interview transcripts, open-ended survey questions, documents). Sandelowski (2010) stated that content analysis is the typical analytic approach in qualitative description, but it can be used in multiple research designs including mixed methods and secondary analyses.

Hsieh and Shannon (2005) differentiated conventional content analysis where investigators inductively develop a coding scheme based on their data from directed content analysis using a deductive approach where the coding scheme is based on an existing framework or prior research. For example, in a qualitative sub-study of a randomized control trial of a group intervention for siblings of children with cancer, Barrera and colleagues (2018) conducted interviews with a purposive sample of siblings and caregivers to elicit their views of group participation and used conventional content analysis to identify themes reflected in participants' descriptions of their experiences. In contrast, Jernigan (2020) directed content analysis in a secondary analysis of focus group data to examine adolescent Black girls' perceptions of health and factors promoting or deterring their development, analyzing the data using a coding scheme based on an intersectionality framework and prior research. Content analyses also vary in the extent to which investigators focus on manifest content directly linked to what the text states or latent content reflecting the investigators' interpretation of the underlying meaning of the text (Graneheim & Lundman, 2004).

In preparation for analysis, investigators should review their data to gain a sense of the whole and finalize decisions about their analytic approach (conventional versus directed; manifest versus latent) (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005). Across approaches, coding, comparison, and synthesis are the primary analytic strategies. Through coding, data are sorted into smaller subsets addressing the same topic or concept, making it possible for the investigator to systematically review all data with a shared characteristic. Coding entails both defining and naming codes and applying them to the data set. Saldaña's (2013) text on qualitative coding provides an excellent description of different code types and practical strategies for developing a coding scheme. The analysis proceeds by accessing all data on a given code and comparing how the code is manifested across subjects. Investigators often use tables or matrices to support the systematic review of coded data across subjects (Miles et al., 2014). During their review and analysis of the coded data, investigators typically collapse codes into a broader, more abstract set of categories and subcategories. Synthesis entails identifying and describing cross-cutting content reflected in the categories or themes, accompanied with illustrative exemplar quotes. The final synthesis is presented as a narrative summary of the findings (i.e., themes or categories) reflected in the data and supported by quotes which serve as exemplars. For more information on content analysis, we refer the reader to these resources: Elo & Kyngäs (2008) and Hsieh & Shannon (2005).

Reflexive thematic analysis is the least structured and most interpretative form of thematic analysis (Braun & Clarke, 2006; V. Braun & V. Clarke, 2021; V. Clarke, Braun, Terry, et al., 2019). Reflexive thematic analysis is a commonly used analytic

approach. It is included in this overview because Braun and Clarke (2006), who have provided leadership in its development, acknowledge that implementing the approach can be challenging (Braun & Clarke, 2019). Like other approaches described above, reflexive thematic analysis can be used with many different types of data and research questions (Braun et al., 2016). In this approach, the analytic process is organic, recursive, and interpretative (i.e., it unfolds in a series of six iterative stages driven by the investigator) (Braun & Clarke, 2006). Analysis begins with (1) data familiarization (i.e., reading transcripts multiple times to get a sense of the data), (2) followed by coding (i.e., assignment of concise labels that capture something important about the data in relation to the research question). Coding is flexible and can be inductive, deductive, or a combination of both. Once coding is complete, (3) initial theme development occurs, (4) followed by thoughtful review, revision, and refinement. Subsequently, (5) each theme is named and defined, and (6) the analytic narrative is written up (Braun & Clarke, 2006). This approach to thematic analysis visualizes themes as "interpretative stories" that say something important about the data in relation to the research question (V. Clarke, Braun, Terry, et al., 2019). Theme development is flexible and interpretative, driven by researcher experience and/or the research question. It is an active process and may result in both latent and semantic themes. The goal is to have themes that tell an insightful, cohesive story about the research question (V. Clarke, Braun, Terry, et al., 2019). Themes are often portrayed visually to demonstrate how they relate to each other (e.g., thematic map) (Braun et al., 2016). For more information on reflexive thematic analysis, we refer the reader to these resources: Braun and Clarke (2006), Braun and Clarke (2021) and Braun and Clarke (2022).

Rigor in Qualitative Analysis

Ensuring rigor is an important aspect of qualitative analysis. Following rigorous methods throughout qualitative analysis is a way of establishing confidence in the findings (Thomas & Magilvy, 2011). There is debate in the field, however, about how to ensure rigor in qualitative research (Mays & Pope, 2020; Reynolds et al., 2011). One approach is to use reporting standards which have been developed to provide researchers with a guide for how to demonstrate rigor throughout the qualitative research process, from study design to analysis and reporting of results. These reporting standards can be a useful tool for researchers to help them anticipate and plan for rigorous analytic methods. Two reporting standards for qualitative research are commonly used which include key ideas about analysis, although others exist (Peditto, 2018). The consolidated criteria for reporting qualitative research (COREQ) is a 32-item checklist developed specifically for reporting research related to interviews and focus groups (Tong et al., 2007). Alternatively, the Standards for Reporting Qualitative Research (SRQR) consists of 21 items that provide a guide for reporting qualitative research in general (O'Brien et al., 2014). In addition, the American Psychological Association 7th Edition includes Qualitative Research Reporting (Journal Reporting Standards [JARS-QUAL]) (American Psychological Association, 2018, 2020). Journals increasingly require authors to use and report adherence to one of these guidelines, however, they can also be useful when conceptualizing and conducting a study as a way of helping ensure adherence to rigorous methods (Peditto, 2018).

Not everyone agrees with the use of these standards, however. For example, Braun and Clarke (2013) identify other checklists designed to assess quality, including

their own for thematic analysis, and present some of the concerns regarding their use. Ramanadhan et al. (2021) offer a brief list for communicating rigor during qualitative analysis. They indicate that reporting checklists such as those identified above help ensure the details of the research are effectively communicated and recommend combining their suggestions with one of the checklists.

Although there is no universal checklist or method for addressing rigor in qualitative research, readers are strongly encouraged to check author guidelines for the journal in which they hope to publish. Journals often have a stated preference and require authors to adhere to a particular method for reporting qualitative findings. For a more detailed discussion of rigor in qualitative research, we refer you to our previous paper on qualitative research (Wu et al., 2016).

General Considerations

The selection of the analytic method should primarily be driven by the research question (V. Braun & V. Clarke, 2021; Wu et al., 2019; Wu et al., 2016). Secondary considerations include resources available to the project, including time, staff, and budget as discussed in our previous articles in this series (Wu et al., 2019; Wu et al., 2016). By clearly stating their rationale for selecting a particular analytic approach, investigators provide evidence of the feasibility and credibility of the research.

Further, regardless of the analytic method selected, the team, particularly the principal investigator, should have a general knowledge of qualitative research, including research designs common to qualitative research, data collection techniques, and a broad understanding of analytic methods. The team should also include someone with expertise and firsthand experience with qualitative methods and in the selected

analytic approach beyond graduate training to oversee and guide the analytic process and interpretation of results (Polkinghorne, 2010). The data collection and analytic teams can be the same or different individuals, but regardless of the structure, they should all be trained in their specific roles to help ensure rigor.

Other considerations include the technique(s) used to code and analyze the data. Common methods include pen and paper (i.e., annotating transcripts by writing codes directly on the transcripts, using colored pens or highlighters to distinguish codes, recording codes and quotes on a spreadsheet) and analytic software. Commonly-used software for qualitative analyses include NVivo (NVivo, 2020), Dedoose (Dedoose, 2016), and Atlas-ti (ATLAS.ti, 2022). Others exist, such as MAXQDA (MAXQDA, 2022) which was specifically designed for Thematic Analysis. We refer readers to the following resources to inform decisions of whether to use analytic software: an overview of computer-assisted coding and analysis (S. O. Clarke et al., 2021), pros and cons of different software packages (St John & Johnson, 2000), and key considerations when selecting a software package (Cypress, 2019). The decision as to whether to use analytic software should be guided by realistic expectations. For instance, it is important to acknowledge that analytic software will not analyze the data for the researcher (Wu et al., 2016). The analytic team still needs to identify the coding frame and code the data regardless of coding method selected (manual, electronic). The software simply facilitates the analysis and potentially makes it easier to organize or sort the data. In addition, the choice of software should be made based on the ability of the research team to access the software and data. For instance, software may be available to the research team through different routes (e.g., web-based or computer-based) and

through resources within one's research laboratory or institution. Ideally, institutional research resources will include web-based access to qualitative software that allow team-based analyses.

Exemplar Application of the Selected Analytic Methods

As another way of describing as well as comparing and contrasting the aforementioned analytic methods, we next demonstrate how each approach could be used to analyze data from studies addressing different research questions. We use evaluation of a pediatric weight management program as the exemplar content area. In this example, a pediatric weight management program is designed to be delivered in children's homes by trained staff. While parents and children have been involved in the development of the intervention, the research team wants to understand parent and child perspectives on implementing this type of intervention in the home environment. How each qualitative analytic method may be applied to this exemplar topic is outlined in Table 3.

When deciding which of these four analytic approaches to use, much thought should be given to the research question and which approach is best suited for addressing the question. For example, if the goal is to identify barriers and facilitators to medication adherence, content analysis may be a more appropriate analytic method than reflexive thematic analysis because the intent is to understand a selected aspect of medication adherence. However, if the goal is to understand the lived experience of having to adhere to a rigid medication schedule, reflexive thematic analysis may be more appropriate because the investigator is seeking to understand multiple aspects of the ways in which medication adherence affects the lives of a child and/or their family.

Rapid qualitative analysis may be the choice if planning to implement an intervention targeted at medication adherence. Finally, if the goal is to use the study's theoretical framework to understand more about the intervention from the perspective of the children and parents, framework analysis may be helpful. Additional considerations when selecting an analytic approach include resources available to the team (e.g., time, expertise, budget), type and quality of data needed to address the research aims, and the qualitative expert's level of comfort, familiarity, and experience with each of the methods.

[Insert Table 3 about here]

Discussion

The current paper provided an overview of four qualitative analytic approaches (framework analysis, rapid qualitative analysis, content analysis, and reflexive thematic analysis) that may be particularly useful for pediatric researchers conducting research with real-world application. The methods were compared in terms of their analytic strategies, tips for use, terminology, and application to a hypothetical example to provide a pragmatic guide to their use. A glossary of key terms and tips for conducting qualitative analyses was also provided to highlight overlapping aspects of the approaches. Finally, we described two popular methods for reporting about rigorous practices inherent in qualitative analysis that can be useful when planning and conducting qualitative research.

We end with a call for research training programs at all levels to include a greater emphasis on qualitative methods, including data collection and analysis. Such training should ideally begin with coursework that includes an overview of philosophical

perspectives and qualitative methods and experience with data collection, analysis, interpretation, and writing qualitative proposals and/or manuscripts to provide a richer, more nuanced understanding of qualitative research. In addition, mentored qualitative research experiences can build practical experience pairing research questions with appropriate qualitative methods, as well as hands-on experience collecting and analyzing qualitative data (Polkinghorne, 2010).

A limitation of this paper is that it is not an all-inclusive description of approaches to qualitative analysis. However, we believe our selectivity was justified given our intent was to offer pediatric psychologists and other healthcare professionals an overview of pragmatic analytic approaches not commonly addressed in the psychology literature. In addition, this paper does not address all aspects of conducting qualitative research from conceptualization to reporting. However, we introduce popular reporting standards that offer guidance on the different stages of qualitative research and discuss the controversy in the field regarding constraints associated with their use.

In conclusion, there are many ways to analyze qualitative data. Based on our respective experiences, we offer four pragmatic approaches that we believe will be of benefit to pediatric psychologists and other pediatric researchers and demonstrate how each can be operationalized. The qualitative approaches described have strong potential to reveal important aspects of how children and their families experience a broad array of health challenges. Our hope is that making qualitative analytic strategies more accessible to a broader group of researchers will contribute to increasing the quality of qualitative research conducted and reported in the literature and support

researchers in confidently and competently developing qualitative analyses that are grounded in established approaches.

Funding

This work was supported by a grant from the Oncology Nursing Foundation Research Grant (JD); support from the Department of Dermatology of the University of Utah (YW); support from the Department of Nursing & Midwifery at Sheffield Hallam University, UK (VS); and the United States Department of Agriculture/Agricultural Research Service, Cooperative Agreement No. 58-3092-5-001 (DT).

Acknowledgment

This is a publication of the United States Department of Agriculture/Agricultural Research Service (USDA/ARS) Children's Nutrition Research Center, Department of Pediatrics, Baylor College of Medicine, Houston, Texas (DT). We would also like to extend our gratitude to our pre-reviewers for their thoughtful comments and suggestions - Dr Sadiq Bhanbhro (Senior Research Fellow, Health Research Institute, Sheffield Hallam University, UK) and Ms. MaryJane Campbell, Department of Psychology, University of Utah, USA).

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