Integrative Review

Guidance for Qualitative Research Manuscripts in Pharmacy Education

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\section*{ARTICLE INFO}

\textbf{Keywords:}
American Journal of Pharmaceutical Education
Pharmacy
Education
Qualitative research
Publication

\section*{ABSTRACT}

The goal of this Best Practice Review is to support researchers in successfully preparing and publishing qualitative research in pharmacy education. Standard practice from the literature and journals’ guidance from related fields were reviewed, and recommendations and resources applicable to qualitative research in pharmacy education were compiled for researchers planning to conduct and publish qualitative research. This review provides recommendations, not requirements, for publication in the \textit{Journal} and is intended to be a guide, especially for authors and reviewers relatively new to the field of qualitative research. Additionally, researchers planning to publish their qualitative research are advised to review available best practices and standards, such as the Consolidated Criteria for Reporting Qualitative Research checklist and the Standards for Reporting Qualitative Research. Given the diverse methodology of qualitative research, it is important for authors to provide sufficient details and justifications of selected methods for transparency and to report collected results in a manner that allows reviewers and readers to adequately assess the validity of their study and the applicability of the findings.

\section*{1. Introduction}

This article reviews best practices and available resources and compiles recommendations for publishing qualitative research manuscripts in the field of pharmacy education. The objective of this review is to support researchers in successfully preparing, conducting, and reporting qualitative research for publication.

\section*{2. Initiating Qualitative Research}

When designing research studies, 2 broad ways exist for researchers to design, collect, and interpret data: quantitative and qualitative.\textsuperscript{1} Quantitative research relies on numbers, numeric scores, or ratings and generally involves a large number of participants.\textsuperscript{2} In comparison, qualitative research relies on descriptions (versus statistics) and involves constructing, analyzing, and interpreting themes from data, seeking depth versus breadth.\textsuperscript{3} The goal of qualitative research is to describe what is occurring while offering insights into people’s experiences, behaviors, attitudes, feelings, beliefs, perceptions, expectations, or satisfaction.\textsuperscript{4,5}

While defining what qualitative research is, it is also important to consider what it is not. The basis of qualitative research is not generally quantifiable, as qualitative research seeks to make meaning behind things that happen. Qualitative research generally does not include surveys, particularly portions that rely on rating scales or multiple-choice questions.\textsuperscript{6} However, if the survey uses open-ended questions collecting in-depth answers, it is a qualitative survey (see best practices for survey research for more details).\textsuperscript{7} Additionally, qualitative data are not intended to be generalizable to the population at large as the findings are designed to be relevant to the specific populations studied.\textsuperscript{8} Nevertheless, investigators and pharmacy educators as an audience can find inherent value in the techniques, and qualitative research can

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https://doi.org/10.1016/j.ajpe.2023.100089

Received 19 July 2022; Received in revised form 17 February 2023; Accepted 26 February 2023
Available online 9 May 2023

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reveal a solution to a research question when quantitative research is not ideal or does not fully answer the question. For certain research questions, investigators may employ mixed methods research, which uses both qualitative research and quantitative research, to explore both the frequency of observations as well as the meaning behind the findings.

Qualitative research may be most suitable in situations where traditional quantitative methods may not suffice. For instance, it may be useful in conjunction with quantitative research when additional details regarding the “why” are necessary to further elucidate the research question(s). In general, qualitative research methods are most helpful in assessing intangible concepts, opinions, or experiences more thoroughly. Examples of such topics include spirituality, wellness, or culture in pharmacy education. Qualitative research can also be hypothesis-generating research when little is known about a topic, the boundaries are not clear, or the phenomenon is not quantifiable. Most qualitative research involves a small number of participants who are studied in-depth and/or over time.

Although sources differ in identifying the exact number of methodological approaches for qualitative research, 5 commonly recognized approaches include phenomenology, narrative, grounded theory, ethnography, and case study. Researchers may elect to employ 1 or a combination of these approaches, depending on the nature of the work. Phenomenology seeks to understand an observed or “known” phenomenon or concept by attempting to capture the “essence” of a particular phenomenon through participants’ “lived experiences.” Alternatively, narrative inquiry seeks to identify new research questions and areas of research through the use of 1 or more individuals’ stories and experiences as the basis of the research; grounded theory focuses on building a theory or model from data collected from many participants. Ethnography is unique in that it specifically explores the culture of a group of people. Lastly, case study describes and analyzes a case over time, usually using multiple sources of information. Cases are specific to or “bounded by” setting, time, and context. Some health science education researchers may choose to root their qualitative research in pragmatism—an approach that focuses on actionable knowledge and the recognition that experience, knowing, and acting are interconnected.

3. Collecting Qualitative Data

Qualitative data are generated through narratives and non-numerical information. Examples of specific qualitative research techniques include, but are not limited to (1) observing and documenting what a researcher sees and hears, (2) evaluating journals, logs, and reflections, (3) conducting 1-on-1 interviews or focus group discussions, and (4) other secondary research involving existing data. A variety of data collection methods are commonly used, including case studies, focus groups/interviews, Delphi, modified Delphi, and document analyses. As aforementioned, qualitative data provide information about experiences and meanings of individuals or groups and are analyzed to explain how and why people form associations with others, with objects, and with their environments.

Regardless of the approach chosen, it is important to establish the trustworthiness of qualitative research in designing data collection processes and research methods. Researchers should consider methods within their qualitative approach that help ensure the credibility (how accurately the data depict the study participants’ perspectives and opinions), transferability (how likely the research can be applied to another setting), dependability (the research process is appropriate for the phenomenon being studied), and confirmability (the extent to which themes and findings are derived by identifiable research data). For example, triangulation is a method that helps improve credibility when conducting qualitative research and involves the use of multiple methods or data sources to develop a comprehensive understanding of phenomena. Thick description, which utilizes robust descriptive language to provide sufficient contextual information about the data, is another technique used to improve credibility and transferability. The iterative process is the act of repeating analyses and/or actions with the purpose of increasing understanding of the subject; it is the systematic repetition of sequences of operations or procedures that aims to achieve a given result. Resources listed in Table 1 describe many other techniques that exist to enhance the trustworthiness of qualitative research. More descriptions are included below on case studies, focus groups/interviews, Delphi, modified Delphi, and document analyses, and examples of each are included in Table 2.

3.1. Case Studies

A case study is a qualitative approach in which a researcher explores real-world, contemporary case(s) over time through detailed and in-depth data collection. Case studies are often used to explain, describe, or explore a phenomenon. Generally speaking, case studies utilize a variety of data sources, and they produce a report of identified case themes.

3.2. Focus Groups

A focus group is a qualitative research methodology utilized to obtain rich insight into attitudes, ideas, opinions, beliefs, and behaviors. The term “focus group” is derived from interviewing a purposeful sample, generally 6–8 participants, with focused questions on a pre-selected topic. Focus groups allow researchers to gather more information in a short period of time, typically a few hours, by interviewing more than 1 participant at the same time (ie, a group). Focus groups can provide insight into complicated topics and are particularly useful when there are power differences between the participants and the researchers (eg, decision-makers or professionals).

Interviews are one of the most commonly used strategies for collecting qualitative data, and there are 3 subtypes of interviews: in-depth interviews, semi-structured interviews, and unstructured interviews. In-depth interviews can be conducted individually or in a group and allow the researcher to delve more deeply into social and personal matters, whereas the group interview allows researchers to learn about a wider range of experiences. Unstructured interviews provide the opportunity...
to observe others and document their behaviors. The interview method selected is determined by the type of data to be collected.

### 3.3. In-depth Interviews

The in-depth interview starts with a basic interview question followed by 5–10 more specific questions to explore different granular aspects of the research topic. In an iterative process, interview questions that are deemed ineffective at eliciting the necessary information may be eliminated from subsequent interviews, and new questions are added, if necessary. Moreover, the researcher can depart from the planned line of questioning during the interview, since deviations may allow researchers to more fully evaluate the interviewee’s knowledge, experiences, and interest.

### 3.4. Unstructured Interviews

Unstructured interviews gather data through participant observation and/or field notes. During this process, the researcher often identifies 1 or more individuals, referred to as key informants, to interview on an ongoing basis. Key informants are selected for their knowledge and their role in a particular setting as well as their willingness and ability to serve as translators, teachers, mentors, and/or commentators for the researcher. Information about the meaning of observed behaviors, interactions, and objects is elicited through questions that emerge over time.

### 3.5. Semi-Structured Interviews

The semi-structured interview may be the sole data source for a qualitative research project. These interviews are usually scheduled in advance at a designated location and time and are organized around a set of predetermined open-ended questions. Other questions may emerge from the dialogue between researcher and interviewee. Semi-structured, in-depth interviews are the most widely used interviewing format for qualitative research. Most semi-structured interviews are conducted only once for an individual and last between 30 min to several hours depending on the topic, depth, and breadth of the discussion.

### 3.6. Delphi

A traditional Delphi uses multiple rounds of data collection and analysis in real-time. The first round consists of open-ended brainstorming sessions to form the basis for a questionnaire that is presented as a series of statements about a topic. This questionnaire is provided to a panel of subject-matter experts during several in-person or virtual synchronous meetings, and they are asked to rank the statements according to their level of agreement. The researchers then share the statement rankings with participants, and participants are encouraged to revise their rankings for最好 fit with the statements. In the last step of the Delphi, the researcher reanalyzes the data. This type of data collection and analysis is considered “controlled feedback” since the researcher shares the statement rankings with the participants in a way to maintain participants’ anonymity, rather than having them communicate directly with each other. Another key distinction is that with a modified Delphi, communication with subject expert participants can be conducted asynchronously through methods such as email instead of in real-time.

### 3.7. Modified Delphi

A modified Delphi also uses multiple rounds of data collection and analysis; however, it differs from a traditional Delphi in a couple of specific ways. For example, a modified Delphi may include the use of a draft or revised questionnaire instead of using the first round for open-ended brainstorming and creating a new questionnaire. Another key distinction is that with a modified Delphi, communication with subject expert participants can be conducted asynchronously through methods such as email instead of in real-time.

### 3.8. Document Analysis

A document analysis is a systematic procedure for reviewing or evaluating printed or electronic documents and materials. Documents

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**Table 2**: Example Publications for Different Types of Qualitative Research and Data Analyses.

<table>
<thead>
<tr>
<th>Types of qualitative research</th>
<th>Example article</th>
<th>Article synopsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case studies</td>
<td><em>Am J Pharm Educ.</em> 2016;80(7):114</td>
<td>An observational case study was used to compare near-peer teaching in medical and pharmacy experiential settings.</td>
</tr>
<tr>
<td>Focus groups</td>
<td><em>Am J Pharm Educ.</em> 2020;84(1):7122</td>
<td>Focus groups were used to explore student pharmacists’ shared experiences as they transitioned through the first 3 years of a Doctor of Pharmacy curriculum.</td>
</tr>
<tr>
<td>In-depth interviews</td>
<td><em>Am J Pharm Educ.</em> 2022;9110</td>
<td>In-depth interviews were used to identify factors that influence professional identity formation in fourth-year pharmacy students.</td>
</tr>
<tr>
<td>Unstructured interviews</td>
<td><em>Am J Pharm Educ.</em> 2018;82(10):6445</td>
<td>Unstructured interviews were used to collect data via mystery shopper participation from pharmacy staff to ascertain how pharmacy students responded to an over-the-counter fever scenario.</td>
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<tr>
<td>Semi-structured interviews</td>
<td><em>Am J Pharm Educ.</em> 2022;86(7):691</td>
<td>Semi-structured interviews were used to better understand and identify developmental opportunities by exploring students’ evolving views of leadership.</td>
</tr>
<tr>
<td>Delphi</td>
<td><em>Am J Pharm Educ.</em> 2019;83(10):7548</td>
<td>A 5-round Delphi process was used to determine the role of entrepreneurship within the broader missions of pharmacy schools and to assist the development of an educational framework for future pharmacist entrepreneurs.</td>
</tr>
<tr>
<td>Modified Delphi</td>
<td><em>Am J Pharm Educ.</em> 2016;80(10):167</td>
<td>A Modified Delphi method was used to identify and define the competencies of individuals designated as assessment leads in colleges and schools of pharmacy.</td>
</tr>
<tr>
<td>Document analysis</td>
<td><em>Am J Pharm Educ.</em> 2019;83(6):6834</td>
<td>Document analysis was used to determine the cost-benefit of teaching and learning technology in a study conducted at a college of pharmacy.</td>
</tr>
<tr>
<td>Thematic content analysis</td>
<td><em>Pharmacy</em> 2021;9(3):151</td>
<td>Focus groups of student pharmacists were conducted to analyze a new patient case format, and codes and new themes were created by inductive analysis.</td>
</tr>
<tr>
<td>Framework analysis</td>
<td><em>BMC Med Educ</em> 2022;22(1):12</td>
<td>Semi-structured interviews were conducted to apply educational theories to investigate perceptions toward pharmacy students’ placements for experiential learning. An “abductive approach” was used to combine inductive coding with deductive theory-driven interpretation.</td>
</tr>
<tr>
<td>Framework analysis</td>
<td><em>Am J Pharm Educ.</em> 2018;82(10):6482</td>
<td>The Global Competency Framework from the International Pharmaceutical Federation was used to evaluate stakeholders’ perspectives on quality assurance of pharmacy education. Interview data were analyzed for themes, and the themes were mapped to the Global Competency Framework.</td>
</tr>
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</table>
contain text and images that have been recorded by the originator without any outside interference. Document analysis interprets the data contained in documents and materials to elicit meaning, obtain greater understanding, and to acquire empirical knowledge. 

4. Analyzing Qualitative Data

Qualitative data analysis methods differ significantly from quantitative data analysis. Two common types of qualitative analyses are addressed: thematic content analysis and framework analysis. Example articles are included in Table 2. 

4.1. Thematic Content Analysis

This method aims to decipher themes, or similar concepts, in the data. Themes can be determined via 2 broad categories: inductive and deductive methods. These methods differ based on whether data fit to a preexisting theory (deductive) or whether data are used to generate a new theory (inductive). Inductive methods are based on careful reading of the data without attempting to fit the data to preexisting concepts or ideas from theory. Deductive methods are more suited to questions where there are a priori concepts from preexisting theories or from a literature search. Qualitative analysis typically involves a combination of these approaches. For example, data analysis may begin with a deductive approach, but as new themes are identified an inductive approach may need to be applied.

To perform qualitative data analysis, audio or video interviews are first transcribed. During transcription, it is important to reproduce the exact words of participants. Researchers read and re-read each transcript to determine specific codes that summarize and identify interesting features in the data. This is done systematically across the entire dataset. A single phrase, sentence, or paragraph can be coded if it refers to a specific concept or feature and if it encompasses a specific thought. Once the entire dataset has been coded, recurring patterns of codes are organized and grouped together to form themes. Simply put, a theme is a pattern in the codes that helps summarize the data. Themes can then be divided into subthemes and analyzed based on demographic characteristics or other variables valuable to the researcher.

### Table 3

<table>
<thead>
<tr>
<th>Manuscript Section</th>
<th>Recommendations and Considerations</th>
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<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>- Describe the background to illustrate the significance in terms of pharmacy education, practice and/or research.</td>
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<tr>
<td></td>
<td>- State your research question clearly with your study setting or context.</td>
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<td></td>
<td>- Explain the compatibility of your research questions with qualitative views and how it relates to the current state of knowledge.</td>
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<td></td>
<td>- Address the rationale for choosing a qualitative research approach.</td>
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<td></td>
<td>- Include a brief review of recent research findings on the topic and summarize the strengths and limitations of the current literature.</td>
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<tr>
<td><strong>Methods</strong></td>
<td>- Clearly state the type of research reported.</td>
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<td></td>
<td>- Describe how the data originated.</td>
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<tr>
<td></td>
<td>- Provide sufficient details for both reviewers and readers to fully understand the processes and procedures (eg, to be able to replicate the study if confirmative study is needed).</td>
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<td></td>
<td>- If mixed methods are used, describe how the qualitative and quantitative data complement each other.</td>
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<td></td>
<td>- Consider reflexivity, or how investigators are connected to and interact with study participants.</td>
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<td></td>
<td>- Justify why particular method(s)/approach(es) were selected.</td>
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<tr>
<td></td>
<td>- Describe how the selected method(s) provide information to meet the stated study objectives.</td>
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<tr>
<td><strong>Recruitment and Sampling</strong></td>
<td>- Provide sufficient details on which participants were recruited and how they were engaged in the study.</td>
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<td></td>
<td>- Describe the sampling method, selection strategy, and criteria.</td>
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<td></td>
<td>- Include sample size, sample characteristics, and dropout and refusal rates.</td>
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<tr>
<td><strong>Data Collection</strong></td>
<td>- Explain why the sample size is considered adequate to address the research question. Data saturation should be defined when applicable.</td>
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<tr>
<td></td>
<td>- Describe any units, materials, or environments used as a sample.</td>
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<td></td>
<td>- Describe how saturation was determined, documented, and achieved (if applicable).</td>
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<tr>
<td><strong>Analysis</strong></td>
<td>- Provide detailed steps and processes used to derive the conclusion(s).</td>
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<td></td>
<td>- Include a full description of thematic analyses to allow reviewers and readers to understand how the themes were established. This will be important to emphasize the trustworthiness of the findings.</td>
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<tr>
<td></td>
<td>- Identify the number of coders. If there were multiple coders, explain how consistency was ensured and how coding discrepancies were resolved.</td>
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<td></td>
<td>- Describe steps in developing and testing coding processes.</td>
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<td></td>
<td>- Describe what measures were taken to improve the metrics of data (eg, credibility, confirmability, transferability).</td>
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<tr>
<td><strong>Results</strong></td>
<td>- Thoroughly synthesize the data to identify themes, relationship between themes, and relationship to other research variables (if applicable).</td>
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<td>- When providing example quotes to illustrate themes, ensure quotes include enough context for the reader to understand their meaning.</td>
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<td></td>
<td>- Describe the complexities and variabilities within the findings.</td>
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<td></td>
<td>- Point out any unexpected findings.</td>
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<tr>
<td><strong>Discussion</strong></td>
<td>- Synthesize the results and draw a conclusion to your research question.</td>
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<tr>
<td></td>
<td>- State key concepts that were identified.</td>
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<td>- Describe how your findings contribute to the current knowledge base.</td>
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<td></td>
<td>- Describe implications of your findings for pharmacy education, practice, and research.</td>
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<td>- Discuss the strengths and limitations of the chosen methods.</td>
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<td></td>
<td>- Discuss alternative perspectives (if applicable).</td>
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<td>- Add new questions or research focus if these were generated.</td>
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* Some of the listed recommendations and considerations may not be applicable, depending on types of qualitative research.
Using multiple researchers and establishing inter-coder reliability is suggested as best practice to validate the codes and themes.

4.2. Framework Analysis

Framework analysis is a type of thematic analysis wherein the data are summarized within a thematic framework. In framework analysis, charts are created to reorganize the data either by themes or per case. Charts contain only summarized data rather than raw data. This is the primary difference from thematic analysis. The charts are then analyzed by comparing across codes. Relationships between codes are examined in a process called mapping and interpretation.

Computer-aided qualitative analysis software is now available to help with data mining and/or streamlining the coding process. Although manual coding is an accepted method and serves the purpose of many qualitative researchers, these computer-aided software packages offer an opportunity to visualize data in 3-dimensional maps of code clusters. This enables researchers to visually see how codes cluster together in the analyzed text. Computer-aided packages are particularly useful for large qualitative analysis projects. However, they can be expensive and involve a learning process to understand how to use the software.

There are other types of analysis techniques such as discourse analysis, grounded theory, and narrative analysis. These methods go deeper and identify relationships and connections within the data rather than simply summarizing and presenting themes. Regardless of the analysis technique selected, transparency is key to reporting findings in a publishable manuscript. The recommendations suggested in Table 3 offer key points to include in a qualitative research manuscript.

5. Reporting Qualitative Data

Researchers are encouraged to consider 3 aspects when developing high-quality manuscripts reporting qualitative research: (1) inclusion of technical details of methods and analysis, (2) use of a clear and engaging writing style, and (3) thoughtful and thorough synthesis and framing of results.

First, appropriate technical details should be reported to communicate the purpose, techniques, and results of qualitative research and to equip reviewers and readers to draw conclusions about the appropriateness and rigor of the qualitative research project. Many technical and analytical details are similar to those required for strong reporting of quantitative research, such as the research question, study setting, researchers’ roles, and data collection, storage, and analysis. However, some additional considerations are warranted specifically for qualitative research. These considerations provide transparency of the research conducted but also help the reader judge the methodological rigor and soundness of the conclusions.

Researchers should review best practices and standards for reporting qualitative research, such as the Consolidated Criteria for Reporting Qualitative Research checklist for interviews and focus groups and the Standards for Reporting Qualitative Research (Table 1). These instruments direct researchers to include details about the qualitative approach (eg, grounded theory, content analysis, etc.), methods (eg, sampling strategy, coding practices, etc.), and reporting of codes and themes. They contain items that guide researchers toward rigorous qualitative approaches, including elements important for critical appraisal of qualitative studies, such as credibility, transferability, dependability, and confirmability. Although these instruments can help ensure the manuscript includes the details needed for readers to determine the quality of the work performed and the conclusions generated, reviewers and readers should not consider the standards as required elements for all qualitative papers but should consider when they are appropriate based on the type of qualitative research reported. Table 3 outlines some of these important considerations specific to qualitative research.

Second, researchers must consider how their writing style contributes to the manuscript. Details are often important for the reader to understand the qualitative methods and implications of the results. For this reason, qualitative manuscripts have a higher maximum word count in the Journal. However, more does not necessarily mean better, so researchers must consider how to most effectively tell the story of their data. Detailed narratives are important to help the reader visualize how the project was conducted and what implications these details have on research data. This is particularly important for qualitative research that involves observations or interactions with subjects, such as focus groups or interviews. For example, in descriptions of focus groups, it is helpful for the author to provide information about how the subjects related to one another and how that may have affected their conversations. In addition to the audio/video recordings and transcripts, what additional data help describe relationships or personal interactions among the group? Did the subjects know each other before the focus group session, or were steps taken to familiarize them with each other? Were they conversational or hesitant to interact? Did their body language suggest they were comfortable sharing information? Did group dynamics change during the session and impact the data? These details help the reader envision participant interaction and gain a sense of the trustworthiness of the results.

To further engage the reader in the qualitative narrative, an engaging writing style, specifically utilizing first-person writing, is recommended, with an organized flow to enhance the clarity of reporting. Reviewing previously published recommendations for reader engagement, creativity, and persuasion can help authors both succinctly and vividly illustrate their findings (Table 1). Finally, the qualitative analysis should not be limited to a simple frequency report of codes. Quantifying code frequencies within a predefined code system can be helpful, but, when possible, authors should carefully and thoroughly examine the data for deeper meanings and relationships. Through inductive or deductive methods, qualitative data are interpreted to produce themes and subthemes that explain a social phenomenon. The results can be further developed by searching for and describing relationships among or between themes and other data such as participant characteristics. Figures that visually depict relationships between themes may also be helpful to the reader’s understanding. The initial categorization is the first step in understanding the data, but the latter analysis and resultant development of more complex themes and relationships between themes provide richer results more suitable for deeper interpretation and applicability.

6. Guidance for Authors

There are several differences between qualitative and quantitative research. Given these differences and the relative lack of familiarity with qualitative research methods expressed by many within pharmacy education, there are several methodologic and results-oriented problems that can lead to errors that limit research publication potential. Some example mistakes often seen in qualitative manuscripts submitted to the Journal are discussed here.

Common mistakes are sampling errors which occur when researchers either fail to choose an appropriate sample or do not sufficiently explain how or why the sample was chosen. Authors may fail to realize the importance of selecting the proper group of people with the requisite perspective and expertise to answer the specific question or phenomenon being researched. For example, sampling a focus group of students to describe a phenomenon that mostly affects faculty members would result in data that have little to no relevance or ability to answer the question at hand.

Incorrect qualitative data analysis selection is another common mistake. Researchers first conducting qualitative research may accidentally select a data analysis strategy that does not match their methodology. Depending on the type of qualitative study methodology used, editors and reviewers have expectations for appropriate data
analysis very similar to statistical analysis in quantitative research studies. For example, conducting a one-time focus group interview for an ethnography qualitative study would be inappropriate, since inherent to the methodology of an ethnographic study is the observation of people in an environment, making a one-time focus group insufficient and likely to lead to an article being rejected for publication.

Unclear or missing descriptions of the phenomenon being researched or contextualization of study findings within the current literature is another common mistake in qualitative studies hampering publication potential. Often, this lack of clarity or clear statement of the importance of the research leaves reviewers asking, “so what?” Researchers must clearly build the importance and need for this qualitative study to be conducted using literature review and the manuscript introduction.

Similarly, the mistake of ignoring the impact of researchers’ theoretical perspectives or not acknowledging the biases and beliefs of authors or participants limits publication potential. Having this explicitly stated in the manuscript is important as many decisions and processes in qualitative research are affected consciously or unconsciously by these beliefs and theoretical perspectives, which ultimately influence the application and interpretation of findings.

Failure to appropriately describe or reach data saturation (the point where there are no additional unique qualitative data/categories compared to what has already been collected) is another common mistake. Data saturation should be explicitly detailed and is very important, especially if one is doing a thematic analysis.

Lastly, many qualitative studies have difficulty in peer-review and publication due to insufficient descriptions of how data were generated and analyzed, making it difficult for readers to make important determinations about the trustworthiness of the data. Authors should carefully consider whether their manuscript details their approach in ways that help ensure the credibility, transferability, dependability, and confirmability of the research.

Table 3 summarizes the list of recommendations compiled to assist authors in preparing qualitative research manuscripts. These recommendations are applicable for manuscript submissions to the Journal with the purpose of providing additional guidance for successful publications. However, authors are encouraged to seek and refer to additional resources most relevant to their research methods because appropriate writing on collecting, analyzing, and reporting data is highly dependent on the types of qualitative research being conducted.

7. Guidance for Reviewers

Reviewers should start by determining an author’s adherence to reporting qualitative research standards such as the Standards for Reporting Qualitative Research (SRQR) or Consolidated Criteria for Reporting Qualitative (COREQ) during a peer-review. A novice reviewer can also use the proposed recommendations to help identify a high-quality qualitative study (Table 3).

Reviewers should consider various important aspects of qualitative research. In terms of data sampling, qualitative studies should include a sample broad enough to capture significant events and details. The sampling process should be clearly outlined, and limitations should be detailed. Both data collection and analysis should be justified and aligned with the selected methodology. Data collection strategies should be provided in detail, and techniques, such as thick description, triangulation, or the iterative process, should be used to help provide context for the research to the reviewer. A detailed description of how data were collected and systematically analyzed should also be reported to allow the reviewer to assess the trustworthiness of the research. Trustworthiness can be determined through credibility, dependability, confirmability, and transferability.

Reviewers should evaluate and comment on whether the study has transferability by considering whether they can transfer the results of the study to their own settings. The author should clearly state how study findings relate to and build upon existing research. Reviewers should also focus on research ethics as ethics committee approval, participant consent, and confidentiality are important for participant protection. In addition, reflexivity should be used by the researcher to explain the relationship between themselves and participants, consider their potential biases, and assess how they might have influenced study outcomes. Reflexivity requires continual reflection by the researcher throughout the qualitative research process and should result in a statement of how their biases and position may have influenced the process. Lastly, the clarity of the research is important to determine whether a submitted qualitative research manuscript is of high-quality. Clear and specific descriptions of the study design and research process are key to determining the publication potential. Additional resources for more experienced reviewers are also included in Table 1.

8. Conclusion

This best practice review provides guidance for researchers planning to conduct and publish qualitative research. Useful resources are listed in Table 1. Examples of previous qualitative research are included in Table 2. Key recommendations are described in Table 3. Future authors and reviewers are welcome to use this review as a guide and reference for publication of excellent qualitative research.

Funding/Support

None.

Author Contributions

Conceptualization, MKS, MLB, LMCK, RD, JEF, MSM, ANP, MMT, AMF. Investigation, MKS, MLB, LMCK, RD, JEF, MSM, ANP, MMT, AMF. Project administration, MKS, AMF. Supervision, MKS, AMF. Validation, MKS, MLB, LMCK, RD, JEF, MSM, ANP, MMT, AMF. Visualization, MKS. Writing - original draft, MKS, MLB, LMCK, RD, JEF, MSM, ANP, MMT, AMF. Writing - review & editing, MKS, MLB, LMCK, RD, JEF, MSM, ANP, MMT, AMF.

Declaration of Competing Interests

None declared.

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