

Throughout the year, this column's authors have addressed ideas and strategies that were suggested in the January column—The Future of Oncology Nursing Research: Research Priorities and Professional Development. The following article focuses on a method of critique that can be used by oncology nurses when assessing qualitative research findings for translation and application to clinical practice.

The Application of Qualitative Research Findings to Oncology Nursing Practice

Colleen Ann Cuthbert, MN, RN, NP-Adult, and Nancy Moules, RN, PhD

The Oncology Nursing Society (ONS) has established an ambitious research agenda and professional priorities based on a survey by LoBiondo-Wood et al. (2014). With the overall goal to “improve cancer care and the lives of individuals with cancer” (Moore & Badger, 2014, p. 93) through research activities, translating those research findings to direct clinical practice can be overwhelming. As clinicians, understanding how to critique research for quality prior to incorporating research findings into practice is important. The ultimate goal in this critique is to ensure that decisions made about patient care are based on strong evidence. However, the process for appraisal of qualitative research can be ambiguous and often contradictory as a result of the elusive aspect of quality in qualitative research methods (Seale, 1999). In addition, with more than 100 tools available to evaluate qualitative research studies (Higgins & Green, 2011), a lack of consensus exists on how to critically appraise research findings.

The purpose of this article is to outline the process of critiquing a qualitative research study using the Cochrane Collaboration Qualitative Methods Group (CCQMG) appraisal guide (Hannes, 2011). A critique of a research article of the experiences of palliative care patients and their caregivers, using the criteria of the CCQMG, will be presented. A founding principle of the Cochrane collaboration is to evaluate “outcomes that matter to people making choices in health care” (Cochrane Collaboration, 2013, p.n.p.), aligning this method of critique with the priorities of ONS.

Appraisal Process

The Cochrane Collaboration's primary work is to conduct systematic reviews of healthcare research to determine interventions that are most helpful for patients. The integration of qualitative evidence is considered a valuable approach to inform and enhance quantitative research (Cochrane Collaboration, 2013). The three stages in the CCQMG process include filtering, technical appraisal, and theoretical appraisal.

These three stages will be used to appraise the research article “Experiences of Rural Family Caregivers Who Assist With Commuting for Palliative Care” (Lockie, Bottorf, Robinson, & Pesut, 2010). This qualitative research was conducted as a part of a larger study of the needs of rural palliative care patients and their family caregivers. In this study, family caregivers of patients receiving treatment at a regional cancer center were interviewed for the purpose of understanding the experience of commuting to receive palliative care services (Lockie et al., 2010).

Filtering is used to determine whether or not an article is reporting on a qualitative research study. At a minimum, a qualitative research report should include a description of the sampling strategy, the data collection procedures, the data analysis, and the methodology. For novice reviewers, distinguishing between a qualitative research report and other types of descriptive articles is important.

Lockie et al. (2010) reported that they used a qualitative descriptive design and semistructured interviews with a

purposive sample of 15 participants. Their process of data analysis was independently conducted open coding in addition to using NVivo data management software. Based on this information, it was determined that they conducted and reported findings from a qualitative research study.

Technical Appraisal

The overall goal of the technical appraisal is to evaluate the rigor of the research process and the trustworthiness of the findings. The CCQMG has incorporated Lincoln and Guba's (1985) concepts of credibility, transferability, dependability, and confirmability as core elements of this process. Examples of the technical appraisal from Lockie et al. (2010) are presented in Table 1.

Credibility refers to evaluating the fit between the data and the research findings (i.e., determining whether the findings are coherent and make sense) (Hannes, 2011; Spencer, Ritchie, Lewis, & Dillon, 2003). Lockie et al. (2010) presented quotes from the transcribed interview data. Of the seven quotes provided, only two of the excerpts substantiated the stated research findings. It was also difficult to appreciate how the findings were determined without a more detailed explanation of the data analysis process. As a result, lack of credibility of the findings exists as presented.

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Table 1. Technical Appraisal of Research Findings

Core Criteria	Example From Lockie et al. (2010)	Appraisal Remarks
Credibility	<p>“Early on we felt it was something the two of us could do with no help . . . you’re married 43 years, you figure, well, okay, you can do this,” (p. 80).</p> <p>The researchers stated that ongoing discussions with research team members occurred throughout the data analysis process.</p>	<p>This quote was used to substantiate the research finding that strong social networks in rural communities are important factors that influence commuting patients and caregivers’ experiences. This quote is related to strong marriages.</p> <p>The remarks about this aspect of data analysis do not provide enough information about how the discussions informed decisions and how final conclusions were reached.</p>
Transferability	<p>Study participants were described through demographic data, the context of the rural setting, the cancer treatment setting, and the types of services patients were commuting for.</p>	<p>The authors clearly outline that a homogeneous sample and specific study setting limits transferability of research findings to similar populations. The clear description of the sample and setting helps to establish transferability.</p>
Dependability	<p>Data collection included a demographic questionnaire and face-to-face semistructured interviews.</p> <p>Field notes and an electronic audit trail were used.</p> <p>Data analysis consisted of NVivo software to generate themes and then constant comparison technique was used to refine themes.</p> <p>Researchers’ philosophic position, ideas and values that informed the research, and the researchers’ perspectives about the need for this research were not included (often termed <i>reflexivity</i>).</p>	<p>Questions for the interviews were not provided; this would have improved dependability.</p> <p>Field notes and an audit trail help to establish dependability.</p> <p>Constant comparison is a grounded theory data analysis technique. No explanation was provided to explain why this was used.</p> <p>The lack of clear articulation of the researcher(s) reflexivity decreases the dependability of the research.</p>
Confirmability	<p>Findings of the <i>toll of commuting</i>, and the <i>context of commuting</i> were not substantiated with verbatim quotes. The theme of family caregivers recommendations for commuting did not fit with the verbatim quotes.</p> <p>Credibility, transferability, and dependability have not been established.</p>	<p>Findings are not clearly grounded in the data and conclusions reached by the researchers are not always clear.</p> <p>As credibility, transferability, and dependability have not been established and findings are not clearly linked to the data, confirmability has not been established.</p>
Note. Based on information from Lockie et al., 2010.		

The determination of transferability is based on how well the researchers describe the study participants and the setting (Hannes, 2011). Lockie et al. (2010) adequately described the study participants and provided enough background and demographic information to establish which group of people they interviewed. The lack of transferability to different populations is not a flaw of this research, as the particular experience rather than the general experience is central to qualitative research.

Dependability is the process of examining whether the steps in the research process were “logical, traceable, and clearly documented” (Hannes, 2011, p. 4). Dependability helps to establish the trustworthiness of the research findings (Tobin & Begley, 2003). Dependability is also based on understanding how the researcher’s own philosophy, values, and perspectives have influenced the research process and findings (termed reflexivity). A clear documentation of

the steps in data collection and analysis were presented by Lockie et al. (2010); however, the lack of explication of researcher reflexivity decreases the dependability of this research.

Evaluating confirmability involves determining if the findings are clearly grounded in the data and if it is clear how conclusions and interpretations have been reached (Hannes, 2011). Confirmability also depends on whether the authors have established credibility, transferability, and dependability (Tobin & Begley, 2003). Confirmability tells the reader that “the findings are not figments of the inquirer’s imagination” (Tobin & Begley, 2003, p. 392). Confirmability has not been established as credibility, transferability, and dependability have only been partially established and the process of research (including audit trail and reflexivity) is not clearly traceable.

Lockie et al. (2010) used a qualitative descriptive design to understand the

experiences of patients with cancer and their families commuting for palliative care. The authors clearly demonstrated, through a review of the extant literature, that research in this area is limited. A qualitative descriptive design is appropriate when an initial understanding or description of a phenomenon is needed (Neergaard, Olesen, Andersen, & Sondergaard, 2009; Sandelowski, 2000).

The purposive sampling strategy outlined is consistent with qualitative research. Data collection included demographic questionnaires and audio recorded semistructured interviews in the participants’ homes. The recording of field notes at the time of the interviews was reported; however, no explanation was provided of how the field notes were used. In addition, no description of who collected the data and no samples of the demographic questionnaire or interview questions were provided.

Other key points detract from the overall methodologic soundness of

this study. In the discussion of research findings, other relevant research with similar results is referenced; however, the link between the findings and other research is often unclear. For example, the researchers stated that the commuting experience of their participants magnified the physical, psychological, and economic burden that is often described in other family caregivers. Although it has been established in the family caregiver literature (Northfield & Nebauer, 2010; Northouse, Williams, Given & McCorkle, 2012; Stenborg, Ruland, & Miaskowski, 2010), the physical and psychological burden of the participants in this study was not thoroughly demonstrated. As a result, the conclusions reached do not always flow from the data.

Theoretical Appraisal

The final stage in the CCQMG appraisal process includes an examination of the theoretical underpinnings of the research. In qualitative research, the theoretic framework guides the process; therefore, any critical appraisal must include a determination of the researcher's articulation of their paradigmatic perspective (Dixon-Woods, Shaw, Agarwal, & Smith, 2004).

A qualitative descriptive design, although the least theoretical of the qualitative research designs, does not lack theoretical foundation (Neergaard et al., 2009; Sandelowski, 2000, 2010). Preconceived understandings of the topic of interest must be clearly identified by the researcher and considered throughout the research process. Lockie et al. (2010) named qualitative descriptive as their method, but did not provide an explanation or a discussion about the underlying theoretic framework. Therefore ascertaining how the research process was guided is difficult.

Conclusion

Reaching a final conclusion about the quality of a qualitative research study depends on weighing of methodologic flaws against findings and conclusions. Hannes (2011) argued the determination of overall quality means that "quality of reporting, methodological rigour, and conceptual depth and breadth" (p. 1) has been achieved. The research described by Lockie et al. (2010) does not consistently meet the criteria outlined by the CCQMG as a standard for quality in qualitative research.

How is it determined whether this study constitutes evidence that can be incorporated into clinical practice? If the criteria outlined by the CCQMG is considered, the research findings presented by Lockie et al. (2010) should not be used solely when making decisions about patient care or changing models of care. This research does, however, raise awareness that patients receiving palliative care and their caregivers, who are commuting for treatment, may experience additional difficulties compared to those patients who do not commute. The study also encourages oncology nurse researchers to further explore the needs of rural family caregivers of patients with cancer seeking palliative care services.

Colleen Ann Cuthbert, MN, RN, NP-Adult, is a PhD candidate in the Faculty of Nursing program and Nancy Moules, RN, PhD, is a professor in the Department of Nursing, both at the University of Calgary in Alberta, Canada. Moules is also an editor of the *Journal of Applied Hermeneutics*. This study was supported, in part, by the Canadian Institutes of Health Research Doctoral Award, the Psychosocial Oncology Training fellowship, Izaak Walton Killam Doctoral Scholarship, and graduate student funding from the University of Calgary. Cuthbert can be reached at ccuthbe@ucalgary.ca, with copy to editor at ONFEditor@ons.org.

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Leadership & Professional Development

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