Designer's Corner

Authentic Qualitative Research and the Quest for Methodological Rigour

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The nursing literature has witnessed a veritable explosion of qualitative research over the last two decades. Advocates of this trend would argue that it has clearly enriched our understanding of nursing phenomena, whereas sceptics might suggest that it has blurred the scientific foundations of our discipline. I would argue that both these positions have merit.

In this short paper, I would like to address two related points. First, I will briefly discuss the problematic relationship between qualitative research and scientific tradition. Second, I will argue for the utilization of distinct criteria for methodological rigour that should be systematically upheld in qualitative nursing research.

This discussion will call on nursing scholars to critically examine the values that underlie nursing research and knowledge development. This will particularly reflect upon contested conceptions of "reality" and "truth" and how nursing epistemology *ought* to be construed. Although such an analysis is pertinent for the largely qualitative research addressing ethics, values, and decision-making (the theme of this issue of the Journal), this paper is directed to the broader nursing research community — designed to challenge some current controversies regarding the foundations of qualitative research.

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Qualitative Research: Is It Science?

Qualitative researchers have adopted a diversity of stances on the relationship of their work to science. A dominant view is that such research provides a necessary foundation for any emerging field of inquiry where very little is known. A qualitative study can help ensure the canvassing of a domain of interest that guards against the imposition of a priori presuppositions, striving to identify the domain's most pertinent phenomena and the contexts within which they unfold.

This stance was formally articulated well in Dickoff and James's (1968) classic outline of the four principal levels of nursing inquiry (factor-searching, factor-relating, situation-relating, and situation-producing). This framework highlights the first two levels (factor-searching, factor-relating) as particularly suited for qualitative research.

Within this form of thinking, such work would give rise to "evidence-based" hypotheses that could in turn be examined more rigorously with quantitative methods. This outlook regards qualitative research as foundationally significant towards "good science." Many investigators extend this view and conduct studies that mix qualitative and quantitative methods within the same study, relying on the merits of each to ensure the most "truthful" representation of a domain.

A fundamentally opposed view would argue against such an epistemological and ontological hierarchical positioning of qualitative research. To understand this position, it can be helpful to distinguish the *techniques* of qualitative research from their corresponding *paradigms*.

Several qualitative research traditions have emerged: grounded theory, phenomenology, hermeneutics, ethnography, feminist, critical, post-structuralist, historiographical, ethnomethodology, postmodern, and narrative among many others. Each of these has elaborated distinctive methodological approaches to data collection and analysis. These would constitute the *techniques* of the specific tradition. However, such techniques are grounded on *paradigms* that articulate foundational assumptions about the field of inquiry and the process of inquiry itself. An authentic utilization of these techniques should be rooted within their respective paradigms.

More specifically, the quantitative research tradition can be said to be based on the paradigm of *positivism* (*postpositivism*, to be more precise). This presumes that "reality" exists and that it is apprehendable (albeit imperfectly). Further, "objectivity" serves as an ideal for such inquiry that strives to produce universalizable knowledge that is valid across time and context (Guba & Lincoln, 1994).

In contrast, the qualitative traditions draw upon relativistic paradigms wherein no single "reality" is recognized but, rather, a multiplicity of realities are claimed to exist, which in turn are all constructed by the perspective of the inquirer¹ (Guba & Lincoln, 1994) — a general outlook commonly referred to as *constructivism*. The various qualitative traditions, each drawing on its own particular view of the world, human life, and inquiry, will consequently give rise to distinctive constructions of knowledge. For example, the knowledge produced through ethnography is partly attributable to the techniques employed, such as participant observation, but this cannot be estranged from the fundamental basis of ethnography which regards *culture* as a primordial phenomenon that shapes all human experience.²

An authentic view of qualitative research would need to recognize the study's respective underlying paradigm. Consequently, attempts to blend such methods with (positivistic) quantitative approaches are highly problematic. A dominant view argues that the former are incommensurate with the latter — that is, the premises on which they rely are so fundamentally disparate as to be irreconcilable.³

Qualitative research in *nursing* is situated in a difficult position within this debate. On the one hand, nursing knowledge has important foundations in the predominantly (quantitative) positivistic health sciences. On the other hand, nursing has more recently drawn on the qualitative traditions of the "human sciences" (largely within sociology and anthropology) to develop innovative approaches to our understanding of complex human experiences.

We are currently in a situation wherein these two traditions, drawing on disparate conceptions of "human nature" and inquiry, have very limited cross-discourses. Consequently, neither can properly benefit from the "discoveries" of the other or meaningfully engage in challenging the claims of the other.

I will add to this a truly unique problem that qualitative research faces within nursing in particular. Nursing, unlike sociology or anthropology, is an *interventional discipline*. Nursing is supposed to employ research in order to effect healthy outcomes. This involves the utilization of research findings to develop nursing practice or inform the development of health policy. This *instrumental* commitment of nursing,

even when interpreted in a most "constructivist" light, has implications for the types of inquiry that can be regarded as "good" nursing research.⁴

Towards a Recognition of "Good" Qualitative Nursing Research

In light of nursing's interventional commitments, some corresponding conditions should be applied towards our recognition of "good" qualitative nursing research. Two conditions seem particularly relevant.

First, such research should address an important nursing problem. A study can be well conducted, yielding highly interesting findings, yet if it does not address a pertinent issue in nursing it will not meet this first condition. For example, the investment strategies of middle-aged Canadian men would not commonly be regarded as an important nursing problem.

Second, qualitative nursing research should conform to some recognized criteria for methodological rigour. This assertion is highly contentious and merits some justification. It is commonly and persuasively argued within the qualitative traditions that no such universally agreed upon criteria exist. It is further argued that any attempts to "impose" such conditions would constrain the imaginative scope of the research, while covertly implanting a layer of positivism upon these distinct paradigms.

Indeed, proponents of these paradigms are particularly concerned about (commonly unarticulated) political phenomena that shape and limit such criteria, systematically determining the types of realities that can be understood. These arguments are particularly well defended by some exemplary "critical" work in the philosophy and history of science (Feyerabend, 1993; Kuhn, 1970).

Despite the merits of these arguments, nursing remains an interventional discipline. Consequently, nursing research will necessarily imply some claims on the "nature of reality," even if these claims are highly implicit. For example, a phenomenological study of grief among young women undergoing abortions might not explicitly claim that its findings correspond with the women's "real" grief — because in the end such accounts are inescapably shaped by the researcher's perspective.

However, a nursing researcher striving towards a reading of the work as favourably affecting the lives of these women, or women in similar contexts, would likely also assert that such accounts are not simply arbitrary or fictitious — that is, some correspondence between the findings and the informants' "real" experiences is sought. Towards that end, each researcher would necessarily employ some methodological rigour.

Such strategies or criteria could be regarded as necessarily idiosyncratic — researcher-defined — to guard against the threat of political or intellectual constraint that I mentioned earlier. However, this does make the process of examining, reviewing, and interpreting such work highly difficult, particularly with regard to implications for nursing practice or health-policy development.

It would seem more defensible to adopt a position of recommended criteria for methodological rigour — that is, selected criteria could be highlighted as conditions for judging the methodological merits of qualitative studies (for funding or publication). However, these would be recommended and not absolute (as within the quantitative tradition), because the qualitative traditions do not share one consensus on this matter. This would leave open the possibility for a researcher to propose alternative criteria for a specific study, with the expectation that a supporting argumentation is provided. However, studies could for the most part be examined in light of these recommended criteria.

Such criteria for qualitative research have already been proposed by several leaders in the field (Guba & Lincoln, 1981; Leininger, 1994; Sandelowski, 1986). Anselm Strauss and his associates have also made important contributions in this area, by putting forth the most documented system for qualitative research data collection and analysis — grounded theory (Strauss 1987; Strauss & Corbin, 1990). All of these works have taken care to ensure that their recommended criteria remain faithful to the distinctive paradigms employed in qualitative research.

I will present an outline of such criteria that I recommend for judging qualitative research proposals or manuscripts. All qualitative studies would be expected to document their respective utilization of these criteria, and the work would be judged accordingly.

These criteria have been selected on the basis of their comprehensiveness as well as their mutual exclusiveness — that is, redundant criteria have been discarded or incorporated into others, while ensuring that the selection encompasses all of the most widely recognized criteria. Four criteria were selected as a result of this process: credibility, confirmability, saturation, and transferability.

Credibility

Credibility refers to the believability or truth value of a study — that is, the extent to which the researcher's account is faithful to the experiences of the informants. This implies strategies that foster proximity of the researcher to the informants while taking measures to guard against having the researcher inadvertently influence the manner in which the informants' experiences are recorded.

One strategy for fostering credibility is the use of triangulation — collecting multiple forms of data and searching for convergence among them. Another strategy is to seek the recognition of persons who understand the experience in question. For example, the researcher could present the preliminary findings to a panel of those who have had the experience themselves or to a panel of experts in the domain.

Confirmability

Confirmability refers to the assurance that data were collected and analyzed in a neutral manner, whereby the researcher's potential distortion of informant accounts is minimized. This can be fostered by obtaining verification of the recorded data and the researcher's interpretations from the informants themselves. This is also supported through an "audit trail" — the maintenance of detailed records of the data-collection and analysis process, whereby a reader could confirm that they would arrive at the same conclusions.

Saturation

Saturation refers to the thoroughness of the data collected. The researcher demonstrates that data were collected until redundancies emerged — that is, the phenomena under study have been examined to the extent that additional data would not significantly contribute to their understanding.

Transferability

Transferability refers to the extent to which the findings "fit" with the experiences of persons in similar contexts. This implies careful consideration in the design of a study to guard against the selection of a unique and idiosyncratic context that bears no resemblance to related settings that would be of concern to nursing. The researcher might also consider using multiple settings to help distinguish phenomena that are

bound to a specific context. This can be verified by seeking comments from persons in similar contexts to determine whether the findings "speak to" their experiences.

In light of the highly contextual nature of qualitative research, it is likely that this criterion will not be readily defensible by an initial study. The transferability of a study may not be supported until studies of additional contexts demonstrate a "fit" with the earlier study.

Concluding Remarks

I have presented an argument that calls for the explicit use of criteria for fostering methodological rigour in qualitative nursing research while remaining faithful to the distinctive paradigms within this body of work — that is, while preserving the authenticity of the inquiry. My argument is grounded in the interventional commitments of the discipline. The promotion of such criteria can help strengthen the links connecting the findings of such studies to the development of nursing practice, health policy, and further research.

Notes

- It should be noted, however, that qualitative research can also be conducted firmly within the positivistic tradition. For example, Charles Darwin's (1859/1968) landmark *The Origin of Species* employed qualitative methods (rich description, categorization, interpretation, hypothesizing, among others no quantitative procedures were employed) while being clearly situated within the worldview of science.
- 2. I am referring here to an anthropological conception of ethnography, given that this research methodology originated within this discipline. Other disciplines (such as sociology) have developed approaches to ethnography that are not necessarily centred on culture.
- 3. This question of incommensurability raises a complex debate that is beyond the scope of this paper. For example, Martin Heidegger (1962) recognized a clear (commensurate) relationship between science and his conception of hermeneutics. However, this is fundamentally different from the form of hierarchy implied by Dickoff and James (1968).
- 4. It should be recognized, however, that *instrumentality* is essentially a positivistic phenomenon one that presumes the world can be apprehended with a level of precision whereby predictive changes can be effected.
- 5. The work of Guba and Lincoln (1981) and Sandelowski (1986) is particularly interesting because these researchers directly contrast their criteria with corresponding criteria within quantitative research.

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References

- Darwin, C. R. (1859/1968). The origin of species. Baltimore: Penguin.
- Dickoff, J., & James, P. (1968). Researching research's role in theory development. *Nursing Research*, 17, 197–203.
- Feyerabend, P. (1993). Against method (3rd Ed.). London: New Left Books.
- Guba, E. G., & Lincoln, Y. S. (1981). Effective evaluation. San Francisco: Jossey-Bass.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Thousand Oaks, CA: Sage.
- Heidegger, M. (1962). *Being and time* (J. Macquarrie & E. Robinson, Trans.). San Francisco: Harper Collins.
- Kuhn, T. S. (1970). *The structure of scientific revolutions* (2nd Ed.). Chicago: University of Chicago Press.
- Leininger, M. (1994). Evaluation criteria and critique of qualitative research studies. In J. M. Morse (Ed.), *Critical issues in qualitative research methods* (pp. 95–115). Thousand Oaks, CA: Sage.
- Sandelowski, M. (1986). The problem of rigor in qualitative research. *Advances in Nursing Science*, 8(3), 27–37.
- Strauss, A. (1987). *Qualitative analysis for social scientists*. New York: Cambridge University Press.
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.