

Designer's Corner

The Potential of Meta-synthesis for Nursing Care Effectiveness Research

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The need for an integration of nursing research findings within particular fields of study has received a great deal of attention in recent years (Sandelowski & Barroso, 2002). This need has arisen largely in response to the increasing numbers of individual research studies on similar phenomena and the lack of cumulative knowledge demonstrating how findings from these discrete studies might inform decisions on health-care delivery (Chalmers, Hedges, & Cooper, 2002). Recently, several nurse researchers have articulated strategies for synthesizing bodies of qualitative research (e.g., Estabrooks, Field, & Morse, 1994; Jensen & Allen, 1996; Paterson, Thorne, Canam, & Jillings, 2001; Sandelowski & Barroso). “Meta-synthesis” has become a generic term for the range of methodological approaches whereby the findings from several research studies are synthesized to produce a new and expanded understanding about the topic of inquiry.

In the following discussion, we will provide a brief synopsis of meta-synthesis research and identify several ways in which this research approach could contribute to an expanded understanding and perhaps new conceptualizations and theoretical underpinnings in the field of inquiry of nursing care effectiveness. Although some of what is published as meta-synthesis research is clearly intended to eventually contribute to nursing care effectiveness knowledge, we were unable to locate any studies in which that level of maturity had been achieved. Because of this, the examples that are provided herein represent other fields of inquiry.

A Synopsis of Meta-synthesis Research

Meta-synthesis is a method of reflecting on the processes and perspectives of a body of research to determine what we know and do not know about the phenomenon under study, as well as to suggest future direc-

tions for researchers, theoreticians, and clinicians. Our own experience with meta-synthesis began when we asked the question, "How can we determine what qualitative research studies have contributed to the body of knowledge in a particular field in such a way that it provides direction for clinical applications and for future research?" Our deliberations resulted in the development of the *meta-study*, a research method for synthesizing the findings, methodological decisions, and theoretical influences of a body of qualitative research (Paterson et al., 2001).

Barroso and colleagues (2003) identify the aim of meta-synthesis as creating "larger interpretive renderings of all of the studies examined in a target domain that remain faithful to the interpretive rendering in each particular study" (p. 154). In synthesizing qualitative research, expanded and new understandings of the phenomenon under study are generated. In contrast to a critical literature review that interprets the strengths and limitations of the individual studies, meta-synthesis exposes and interprets the directions of an entire body of research, advancing some perspectives and not others in the quest to understand various clinical phenomena. For example, in a meta-synthesis of research on living with diabetes (Paterson, Thorne, & Dewis, 1998), we determined that researchers had focused on the positive outcomes, to the exclusion of negative outcomes, of encouraging people with diabetes to assume an active role in self-care decisions.

Meta-synthesis is an interpretation of what the authors of primary research reports have constructed or interpreted in their research. Because most primary research studies are based on the assumption that a phenomenon is socially and historically created and shaped (Thorne, Paterson, et al., 2002), the conclusions of meta-synthesis researchers must be viewed as constructions of constructions rather than as facts or empirically derived truths. Meta-synthesis can offer new understandings and theory in a field of study but is open to the same challenges of interpretation, such as premature closure, that qualitative researchers face when they select research methods or theoretical frameworks or when they analyze data.

The Complexity of Human Health Outcomes

It is well recognized that the study of nursing care effectiveness is inherently challenged by the difficulties associated with attributing health outcomes to specific nursing interventions (Smith, Manderscheid, Flynn, & Steinwachs, 1997). Most of the health outcomes of concern to nursing are profoundly affected by a wide range of personal and contextual variables upon which nursing attempts to exert its influence (Harrison &

Eaton, 1999; Slade, 2002). Meta-synthesis can lead to new conceptualizations of nursing care effectiveness in specific care settings and with specific patient populations by extending the analysis beyond our traditional cause-and-effect interpretations.

Meta-synthesis researchers can interpret and compare the range of outcomes that various researchers identify across settings, patient populations, and data sets. In so doing, they can lend credibility to certain common conclusions while exposing the weaknesses and gaps in others (Thorne, Joachim, Paterson, & Canam, 2002). Kearney and Sullivan (2003) illustrate this potential in their synthesis of 14 studies on effecting lifestyle change. They discovered that popular theories of change fail to account for the dissonance that occurs between people's behaviours and values, needs, and goals, an element critical to prompting a desire for lifestyle change.

The Latent and Manifest Effects of Nursing Interventions

Meta-synthesis of qualitative research can also reveal how the dominant perspectives and methodologies within a field of study may have shaped our interpretations of nursing care effectiveness. For example, Slade (2002) discovered that research in the field of mental health effectiveness is essentially divided between a psychiatric perspective and a phenomenological perspective, neither fully accounting for health-care effectiveness. In a meta-synthesis of research on nurses' home visits, McNaughton (2000) determined that researchers had focused their attention on only some components of the home visiting role. For example, she notes that the body of research revealed little understanding of how factors such as social support might affect nurses' decisions concerning the frequency of home visits.

When meta-synthesis is used to critically reflect on the meaning underlying the aggregated findings of a body of research, it becomes possible to illuminate what researchers have missed by failing to study the effects of interventions "at the individual level of burden of care, and the macro-level of costs" (Slade, 2002, p. 748). Further, meta-synthesis opens up new possibilities by recognizing that a body of work may have systematic biases, such as a focus on the positive outcomes of nursing interventions to the exclusion of negative outcomes. Thus, meta-synthesis creates a framework within which we can extrapolate evidence from a body of research in order to articulate best practices and policy decisions (Forbes, 2003; Morse, Hutchinson, & Penrod, 1998; Morse, Penrod, & Hupcey, 2000).

The Contribution of Meta-synthesis

Meta-synthesis of qualitative research is a formal mechanism for documenting, exploring, and explaining the subtle, nuanced, subjective elements of human health and illness, and the effect that nursing care has on them. On its own, quantitative evaluation of nursing care effectiveness always privileges discrete measures out of their holistic context, and can significantly misrepresent patients' subjective experiences. Individually, qualitative studies are inherently bound by their timing, context, and methodological orientation. Rarely can either approach produce sufficient "proof" to warrant significant change in the policy or care process. Qualitative meta-synthesis serves to elevate the findings of individual qualitative studies to the larger context of the interactional, dynamic element of nursing care effectiveness so that we can better understand its complex dimensions and decide how to grapple with it methodologically. It helps us to minimize the individual relational elements of our inquiries and to strengthen the legitimate thematic claims that cross time and context and stand up to critical scrutiny.

References

- Barroso, J., Gollop, C. J., Sandelowski, M., Meynell, J., Pearce, P. E., & Collins, L. J. (2003). The challenges of searching for and retrieving qualitative studies. *Western Journal of Nursing, 25*(2), 153–178.
- Chalmers, I., Hedges, L. V., & Cooper, H. (2002). A brief history of research synthesis. *Evaluation and the Health Professions, 25*(1), 12–37.
- Estabrooks, C. A., Field, P. A., & Morse, J. M. (1994). Aggregating qualitative findings: An approach to theory development. *Qualitative Health Research, 4*, 503–511.
- Forbes, D. A. (2003). An example of the use of systematic reviews to answer an effectiveness question. *Western Journal of Nursing, 25*(2), 179–192.
- Harrison, G., & Eaton, W. (1999). From research world to real world. *Current Opinion in Psychiatry, 12*, 187–189.
- Jensen, L. A., & Allen, M. N. (1996). Meta-synthesis of qualitative findings. *Qualitative Health Research, 6*, 553–560.
- Kearney, M. H., & O'Sullivan, J. (2003). Identity shifts as turning points in health behavior change. *Western Journal of Nursing, 25*(2), 134–152.
- McNaughton, D. B. (2000). A synthesis of qualitative home visiting research. *Public Health Nursing, 17*(6), 405–414.
- Morse, J. M., Hutchinson, S. A., & Penrod, J. (1998). From theory to practice: The development of assessment guides from qualitatively derived theory. *Qualitative Health Research, 8*(3), 329–340.
- Morse, J. M., Penrod, J., & Hupcey, J. E. (2000). Qualitative outcome analysis: Evaluating nursing interventions for complex clinical phenomena. *Journal of Nursing Scholarship, 32*(12), 125–133.

- Paterson, B. L., Thorne, S. E., Canam, C., & Jillings, C. (2001). *Meta-study of qualitative health research: A practical guide to meta-analysis and meta-synthesis*. Thousand Oaks, CA: Sage.
- Paterson, B., Thorne, S., & Dewis, M. (1998). Adapting to and managing diabetes. *Image: Journal of Nursing Scholarship*, 30(1), 57–62.
- Sandelowski, M., & Barroso, J. (2002). Finding the findings in qualitative studies. *Journal of Nursing Scholarship*, 34(3), 213–219.
- Slade, M. (2002). What outcomes to measure in routine mental health services, and how to assess them: A systematic review. *Australian and New Zealand Journal of Psychiatry*, 36, 743–753.
- Smith, G. R., Manderscheid, R., Flynn, L. M., & Steinwachs, D. M. (1997). Principles for assessment of patient outcomes in mental health care. *Psychiatric Services*, 48(3), 1033–1036.
- Thorne, S. E., Joachim, G., Paterson, B., & Canam, C. (2002). Influence of the research frame on qualitatively derived health science knowledge. *International Journal of Qualitative Methods*. Retrieved April 15, 2003, from <http://www.ualberta.ca/~ijqm/english/engframeset.html>
- Thorne, S., Paterson, B., Acorn, S., Canam, C., Joachim, G., & Jillings, C. (2002). Chronic illness experience: Insights from a metastudy. *Qualitative Health Research*, 12(4), 437–452.

Authors' Note

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