Qualitative Research and Clinical Care

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In this issue of *The Journal of Family Practice*, Elder and Miller¹ have provided readers with a thoughtful, comprehensive, and accessible guide for assessing *qualitative research*. This is a much-needed review. A growing volume of qualitative research is appearing in the medical literature, and while most clinicians understand quantitative research, they are unfamiliar with qualitative research.

Qualitative research seeks to understand *meaning*. It is both exploratory and explanatory. Qualitative investigators see research as an interactive process embedded in an ever-changing world in which rich descriptors are necessary, sampling is purposeful, data analysis is simultaneous with collection, and the research design evolves. These are some of the same characteristics that clinicians use every day to uncover "data" about their own patients.

Qualitative inquiry is not new. It is part of a roughly 100-year debate about what constitutes appropriate ways of knowing about the human condition. This struggle has been between two paradigms or world views. The first is the belief that "what is being studied exists external to and independent of the scientist, who discovers and characterizes its properties and behavior" (positivism). The opposing belief is that "what is being studied is inseparable from the scientist, who devises mental constructs of his/her experiences with it as a means of characterizing his/her understanding of its properties and behavior" (anti-positivism).²

In the United States during the 1920s and 1930s, anthropology and sociology developed qualitative research to include a broad range of perspectives and methods. Although there are different qualitative research perspectives, the essence is *observation* and *interpretation*. Using the "naturalistic interpretive approach," qualitative researchers study events in a natural setting whenever and to as great an extent as possible, while acknowledging

that whatever is observed is subject to their perspective of the event. This is in contrast to quantitative research, in which subjects are removed from their environment or "objectively" studied in the laboratory.

While recognizing a certain truth in good qualitative research, many clinicians still feel uncomfortable with it. This can be attributed to the conflict between our "scientific" training in medicine and our practice experience. Most of us were taught, either explicitly or implicitly, that "real" research is numerical and objective, and that qualitative research, based on observations and talking to people, is not legitimate. Ironically, much of clinical medicine is just that—observing and talking. Science is an approach to "knowing" based on systematic inquiry, hypothesis generation or testing, and theory generation. One can be just as scientific in categorizing observations or interpretations as in counting or using laboratory values. Practitioners recognize the value of qualitative research because they do qualitative research every day.

While large randomized trials are necessary to prove the efficacy of some treatments, the application of these treatments to our individual patients is influenced by our existing knowledge of that patient. "Experience is more important to a physician than theoretical knowledge because it provides the 'acquaintance with particulars' that is so important to clinical wisdom." Qualitative research can explore experiential learning and the individualized application of general principles in clinical care.

The practice of medicine is individual, particular, and context-rich. Clinicians strive to apply generalities to specific patients. *Quantitative research* disregards context while *qualitative research* explores context. As a clinician, I need both quantitative and qualitative research to guide me in the care of my patients. I want a randomized, double-blind, placebo-controlled trial of the effect of different types of hormone replacement therapy for my menopausal patient, but I also discuss with her the limits of this type of therapy for her personally. I listen to her description of the meaning of menopause, and together we negotiate her care.

A key aspect of qualitative research is recognizing that the results vary according to the context. Clinicians

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know this to be true. The description of Johnny's headaches depends on who is telling the story (Johnny, his mother, sister, brother, or school teacher), who's asking the questions (your partner or yourself), and what kind of day it has been for all parties.

Qualitative research also investigates the "stories" of medicine, which illustrate how clinicians understand biomedicine. Our patients describe their concerns as stories for us to interpret. Likewise, anecdotes illustrate the meaning of the practice of medicine for clinicians, eg, "I remember this patient with . . ." Our anecdotes are the milestones of our clinical experience. As a colleague of ours has noted, "The plural of anecdote is data."

Elder and Miller discuss how good qualitative researchers collect information, interpret, and draw conclusions in a logical fashion. In an interview study, for example, who did the researchers talk to and why? How did they decide what was important among all the information gained from the interviews? In the paper, did they give us enough information to make their conclusions believable? These questions parallel clinical inquiry. The clinician asks, "Am I getting the same story from both my patient and his wife? Do the physical examination and my own observations support my diagnosis? What are the other possible explanations (different diagnoses)?" Clinicians modify their diagnoses based on the results of further inquiry and investigations, just as qualitative researchers allow their hypotheses to evolve as information becomes available. Clinicians must include all findings positive and negative—in a fashion that convinces the consultant or insurance providers of the appropriateness of the clinicians' recommendation for management, just as qualitative researchers attempt to convince readers of the accuracy of their conclusions.

Medicine is human science, which is defined by Ian McWhinney as being "about meaning—the meaning of events, experiences, symbols, utterances and behavior. There is no objective test for meaning." Qualitative research answers questions for clinicians that quantitative research cannot. These are questions about individuals' motivation, perceptions, expectations, and meaning. While quantitative research answers the question "how much?" qualitative research answers "why?"

Recent helpful qualitative research includes the following: opinions of family members about the process of discontinuing life support for a loved one,⁴ how older people who have had a hip fracture understand their condition and how it relates to their recovery,⁵ how clinicians survive and thrive providing care to the urban underserved,⁶ trying to understand "difficult" patients,⁷ why patients ask to have Norplant contraceptive implants removed,⁸ how to deliver bad news,⁹ why physicians are reticent to ask about domestic violence,¹⁰ and how family physicians might treat obesity more effectively.¹¹

Elder and Miller¹ have provided an excellent introduction to qualitative research. In contrast to the *P*values and chi-squares of quantitative research, clinicians may find that qualitative research "just makes sense."

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