# Is There a Future for Behavioral Scientists in Academic Family Medicine?

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This article examines the issue of whether nonphysician teachers of behavioral science have a long-term future in academic family medicine. While the question is answered in the affirmative, several sources of threat to the special relationship between family medicine and behavioral scientists are investigated. Various formulations of this working relationship are considered, and a trilateral clinical model is proposed, which emphasizes collaboration regarding multiproblem patients; the establishment of interdisciplinary research endeavors; and the integration of the role of therapist/ consultant to the system, which will provide a counterpoint perspective to the traditional medical world view through ongoing commentary and dialogue. The article concludes with a recommendation that opportunities for participation and influence be available to behavioral scientists within the system of academic family medicine.

Fam Syst Med 10:247-256, 1992

Do we need a second generation of behavioral scientists? In the life cycle of family medicine, we are reaching a point

where, as behavioral scientists, we must ask: Who will come after us, and what will be their role in family medicine? It is presumptuous to attempt to answer these questions completely; in part, the answers will emerge from the ongoing interaction of this next generation of aspiring behavioral scientists with the future realities of family medicine. But unless we, in our generation at least, seriously contemplate the question and make preparations for a partial groundwork from which answers can arise, it is a real possibility that no one may follow, and that the special relationship that has existed between the family physician and the behavioral scientist may become nothing more than a historical aberration.

#### The "Special Relationship"

Before considering the reasons for this pessimistic assessment, a brief review of this special relationship is in order. Training in family medicine traditionally has included a strong, formal interdisciplinary component (13). Family medicine is the only medical specialty that currently expects the in-house presence of a nonphysician as part of every department's educational unit. Because of this, family medicine training has chosen to define itself officially as containing an interdisciplinary dimension.

In part, the emergence of this interdisciplinary, pedagogical approach was influ-

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enced by the intellectual ferment of the time in which it was born. Don Ransom (22) has pointed out that, at a certain point, the evolution of family medicine and family therapy converged within the same temporal framework. Thus, two family-focused fields were developing roughly simultaneously, and it was inevitable that they should ultimately influence each other to some degree. Also, at the inception of the specialty, the quest for academic credibility was conveniently bolstered by the addition of Ph.D.s in newly formed family medicine faculties.

Even more unique, this interdisciplinary relationship has encompassed not only direct patient service, but teaching and research as well. In point of fact, whatever the pragmatic realities of status considerations between behavioral scientists and family physicians, theoretically the relationship has always had at least some egalitarian aspirations. Behavioral science faculty members were hired not only to provide a dumping ground for problem patients, but also as valued participants in the educational and research dimensions of the newly emergent field.

Finally, and most radically, an aspect of the relationship that was rarely explicitly stated, but nevertheless became integral to the function of the behavioral scientist over time, was the role of the behavioral scientist as internal consultant/therapist. In fulfilling this function, the behavioral scientist, from the perspective of outsider, was able both to join with and to confront the family medicine system on an ongoing basis about its evolving values, assumptions, and beliefs. As Don Ransom (21) expressed it, the behavioral scientist's main goal was "to provide continual commentary that works toward a practical reversal of the logical hierarchical structure of current practice" (p. 498).

#### Threats to the Special Relationship

This special relationship, however, is currently in significant jeopardy as a result of two simultaneous trends that have surfaced recently in family medicine. One is derived from medicine's (and society's) current obsession with fiscal bottom lines (27). "Scarce resources" has become a phrase used to justify growing inequities and questionable ethical practices in medicine in general. In family medicine, changing fiscal realities have made many persons question whether behavioral science positions constitute a wise expenditure of limited fiscal resources. As federal monies evaporate, family medicine departments increasingly have to become self-supporting, a situation that impacts not only behavioral scientists, of course, but physician faculty as well.

Nevertheless, this bleak fiscal picture highlights the potential irrelevancy or at best peripherality of the behavioral scientist. While a department of family medicine can function, although regretfully, without its behavioral scientists, certainly no department of family medicine can exist without its family physicians. The conventional wisdom on this point is that behavioral scientists must learn to support themselves, whether through increasingly hard-to-obtain research funds, or through clinical practice. These are pragmatic and sensible suggestions, which in all fairness have been recommended to physician faculty as well. But both potentially detract from the hard-won involvement of behavioral scientists in the teaching of family physicians. At issue is the role that behavioral scientists must be prepared to fill in future family medicine departments.

In addition to indisputable fiscal exigencies, another argument has surfaced disputing the continuing need for behavioral scientists in family medicine. The logic of this perspective is as follows: In the early

days of family medicine, faculty were old-style general practitioners grandfathered into the newly established specialty. Because they often were perceived as having insufficient formal training to teach residents psychosocial skills, behavioral scientists were hired to assume this pedagogical function. Now, however, most departments are staffed by residencytrained, biopsychosocially oriented, boardcertified family physicians who are themselves qualified to teach the biopsychosocial model without major assistance from, for example, psychologists and family therapists. This model asserts that just as a radiologist is available to the family physician to consult about a difficult-tointerpret x-ray, so psychologists, medical anthropologists, and so on, should be available to consult on cases of special complexity. This analysis raises the provocative question: Does the behavioral scientist stand in essentially the same relationship to the family physician as does the radiologist?

It is arguable whether residency-trained family physicians today are more or less sensitive and skilled in dealing with the psychosocial realities of their patients than earlier generations of general practitioners. However, the real question is whether the psychosocial proficiency of the physician faculty is germane to the presence of behavioral scientists in family medicine. Well-trained, reflective, and insightful faculty are clearly highly desirable in any academic department. But one of the liabilities of Engel's (12) "comprehensive physician" model is that, no matter how diligently it is pursued, no one person can successfully master the totality of a wide range of desirable skills. This is especially true in the psychosocial domain in which physicians receive relatively limited training. Thus, granted the presence of psychosocially skillful physician faculty, should training, education, and scholarly activity be exclusively the province of the family physician, or is there a fully participatory role in this context for the properly trained behavioral scientist?

There is something perhaps unavoidably discomfiting about having behavioral scientists in responsible and influential positions on family medicine faculties. To some, it may have the feeling of a boundary violation. As transitional objects, behavioral scientists could be tolerated. But as permanent fixtures, they appear more problematic.

These current threats have found fertile soil in a relationship that has been fraught with confusion and tension since its inception (2, 6). Ross and Doherty (23) assert that behavioral scientists' "ongoing presence [in family medicine departments] is sufficient demonstration of their necessary, though sometimes ambiguous, function in the system" (p. 47). Elsewhere Doherty and Baird (10) write that, the fields of family medicine and family therapy are "natural allies" (p. 1). Yet Ross and Doherty also acknowledge that, in actuality, behavioral scientists have very little in common with physician colleagues, either in training or in daily functions. Others, for example, Bloch (6), have recognized the magnitude of the problem as well, referring to it as a potentially "unbridgeable gulf" (p. 3). The most recent product from the Society of Teachers of Family Medicine (STFM) Task Force on Residency Curriculum for the Future (20) carefully skirts the issue of who does what by wholeheartedly endorsing a biopsychosocial, curricular orientation without specifying the qualifications of those targeted to transmit educationally such an orientation.

When biopsychosocial teaching failures have been reported, for example, in teaching family therapy (4), there has been a (perhaps justifiable) tendency to blame the teacher (that is, the behavioral scientist) for inappropriate content, inadequate methodology, and general failure to comprehend the physician's frame of reference (15). The inference appears to be that if behavioral scientists persist in such educational endeavors, they should develop interventions that "fit" the family medicine context, rather than, for example, being permitted to influence the context itself.

The gravest dilemma, as usual, rests on a matter of interpretation. If, as some claim, behavioral science consists of a packagable set of skills, insights, and techniques (1), then one assumes these eventually can be mastered and learned, whether by other behavioral scientists or by properly receptive physicians. If, however, as Ransom (21) suggests, we are contemplating the virtual "reconstruction of the basis of primary care and the development of new habits of thought and behavior" (p. 497), then it becomes more questionable whether such a goal (which might more properly be conceptualized as a continually evolving and changing process) can ever be effectively accomplished exclusively from within the discipline.

#### The Case for a Continuing Relationship

It is possible that when, or if, the larger medical system becomes truly biopsychosocial in theoretical orientation and actual practice, the need for such an interdisciplinary relationship may disappear. In this best of all possible medical worlds, family physicians and residents would then be functioning on a daily basis in a professional environment that nourished and supported their most deeply held values and beliefs. In such a situation, family physicians-in-training would learn a kind of medicine congruent with the philosophical and ethical underpinnings of their own particular specialty, not only from their formal interactions with family medicine practitioners, but also from the entire ambience of the medical community.

As we all know, however, such a situation does not presently exist, nor is it likely to in the foreseeable future. Indeed, there is much in the current atmosphere that encourages a reductionistic, biotechnological, discontinuous approach to patient care. Under these circumstances, there is an equally compelling if not greater need than ever before for the presence of behavioral scientists formally incorporated within the specialty (as opposed to being outside consultants from another department or from the community) for the following reasons.

The case for a strong physician-therapist relationship has been expressed in the language of pragmatism. Some have attempted to make an argument for the eventual cost-effectiveness of such a relationship, based on decreased physician visits, the more effective activation of preventive approaches, greater efficiency, improved followup, and increased patient satisfaction (14). Paradoxically, however, most authors attribute failures in this area of family physician-family therapist collaboration as due to its time-consuming nature and to fiscal constraints (13). Thus, this argument, while attractive because it is compatible with fiscal bottom-line philosophies, is ultimately not convincing given the present system of health care delivery and reimbursement. In attempting to justify the ongoing presence of behavioral scientists, we must look further to theoretical, structural, and functional values.

The overriding purpose of academic family medicine departments is to socialize trainees into the culture of family medicine through the development of appropriate skills and distinctive attitudes and values. While learning is expected to be continuous throughout the duration of the family physician's professional life, residency provides a unique window of oppor-

tunity for the inculcation of ways of being and doing that ideally will become reflexive and second nature.

Above all, family medicine education should incorporate a unique way of understanding and interpreting the world of medicine and illness. In this regard, there are certain philosophical properties of family medicine that support the existence of behavioral scientists as part of the academic unit. For example, Stephens (28) has written eloquently about the origins of family medicine in a counterculture philosophy. The practice of family medicine demonstrates a concern with particulars, rather than abstractions (19). In a circular process, it strives not only for prediction of disease, but also for understanding of patients (16). While family medicine is comfortably grounded in the best bioscientific traditions, in its approach to patients it is also relational, contextual, connected, and empathic (7). Yet, ironically, while the theoretical basis of the discipline is wellarticulated, actual incorporation of these nontraditional aspects poses continual challenges to family medicine students and residents who find such constructs consistently devalued and demeaned by the context in which they practice.

In this situation, it becomes critical to find easily accessible sources of support and validation. Indisputably, the primary role models for family physicians-intraining are, and should be, other, more seasoned family physicians. But the multifaceted roles of most members of a family physician faculty demand a juggling act in which they move perpetually between direct patient services, administrative negotiations with hospital and university personnel, teaching of procedural skills, comprehensive supervision of large numbers of medical students and residents, and even the occasional effort to implement a complex research protocol. Under these circumstances, and because the family physician is a full member of the very medical establishment that their specialty's theoretical basis calls into question, it is not surprising that a clear and convincing transmission of the specialty's alternative values and assumptions sometimes gets lost in the shuffle. As physicians, M.D. faculty must keep a foot in both camps: the traditional biomedical model and the still-radical biopsychosocial paradigm. It is no wonder that balance is difficult to maintain.

For behavioral scientists, on the other hand, no such conflicts exist. Since many of the physician faculty roles are closed to them because of differences in their professional expertise and formal degree, they will remain permanently outside the mainstream of the medical establishment. They are not, nor should they aspire to be, the role models for the students and residents they train. Rather, their function is more that of a caring and compassionate irritant, intended to right the training boat at critical times when the empathic, relational values of family medicine are in danger of being submerged by the press of medicine as usual. By both personal inclination and formal preparation (9), most behavioral scientists experience these nontraditional understandings of patients and illness as sensible and compatible, and are prepared to advocate for these perceptions. Because of this, some have claimed that an integrated approach to health care is a necessity for the practice of true biopsychosocial medicine (18).

However, it is not only that family medicine has sought reinforcement for its theoretical radicalism by identifying other professionals who can resonate to and elaborate on its unique understandings; rather, it has invited these individuals into the very core of its being—the educational process by which it prepares future generations of family physicians. Because behavioral scientists currently hold faculty posi-

tions with strong teaching expectations, the historical inclusion of behavioral scientists in family medicine faculties presents a structurally unique arrangement, with no parallel in any other professional training. Family medicine embodies in its actual organizational structure a powerful argument for biopsychosocial training that is continuously (as opposed to occasionally) multidisciplinary at its most fundamental level. This kind of structurally embedded commitment provides a striking congruity between the discipline's theoretical emphasis on appreciation of multiple, simultaneous understandings and its actual practice approach to teaching. Modifications of this structural formulation that threaten the centrality of the behavioral scientist in curricular programs would inevitably result in loss of perceived credibility and relevance.

Such interdisciplinary integration has a functionally unique role as well. By having faculty members of technically equal status and importance as physician faculty, but with a different disciplinary background, family medicine departments institutionalize on an intimate, core level a "gadfly" role, the legitimated, internal presence of a sort of loyal opposition permitted to voice divergent viewpoints and challenges to existing pedagogical and clinical perceptions (26). Precisely because behavioral scientists are not physicians, of necessity they are obligated to stand apart from the field, to some extent always to assume the position of outsider looking in. Yet, just as a family therapist, while closely involved with the family system, remains independent of that system, so for the behavioral scientist such separation is not necessarily a disadvantage. Rather, it insures that multiple perspectives and understandings will be incorporated at a training level on an ongoing basis. Thus, the continued presence of behavioral scientists as faculty is one of the clearest ways of protecting family medicine's commitment to maintaining its unique philosophy in the world of medicine.

#### Who Should Be a Behavioral Scientist?

This question leads us back to consideration of the universally loathed term "behavioral scientist." A good case has been made for substitution of more specific and relevant terms, such as family psychologist. However, the generalized nature of the term "behavioral scientist" has its origins in the initial diversity of nonphysicians hired to fill this role, which included psychologists, social workers, psychiatrists, and anthropologists. Indeed, the true common bond between family physician and behavioral scientist is not that they both are trained to treat families (although clearly they both will be familyoriented to some extent), but that they both have therapeutic clinical capabilities and designs. Key here is the recognition that family medicine is a practice profession (25, 26) and requires an orientation that is not purely theoretical. Behavioral scientists functioning within family medicine must have a shared understanding of the day-to-day realities of applied experience based on actual, particularistic, contextual encounters with people seeking help. For family therapists, this is a familiar but not exclusive terrain because it is also inhabited by many other clinically oriented social scientists.

In this regard, it is even technically possible for the "right" family physician to fulfill the behavioral scientist role, physicians who perhaps have special training and expertise in family therapy or other social sciences, and whose interpretation of family medicine securely embodies elements of the "counterculture" vision. However, this individual would have to be dedicated to the *role* of behavioral scientist, rather than to the role of family physician, in order to protect the key aspects, earlier elucidated, of the position's

structure and function from the impingement of more traditional M.D. obligations. I would argue that, in general, the Ph.D. is better positioned to perform these duties since the differences in formal training will of necessity promote and maintain a healthy individuation from traditional role demands.

## What Academic Model Best Expresses the Special Relationship?

In contemplating the preparation of future behavioral scientists, it is easier to say what model should *not* be pursued. Models to be avoided would primarily emphasize direct clinical service, and would place the behavioral scientist in an exclusively ancillary, supportive role to residents and physician faculty. Such models might, for example, relegate behavioral scientists to staff rather than to faculty positions. This approach preserves the temporal hierarchy currently operative in the medical system, with physical diagnosis attended to first, and psychosocial issues raised in supplementary fashion only as necessary. In this framework, the behavioral scientist is effectively excluded from participation in the early diagnostic process with residents and students (24), as well as from significant decision-making about larger curricular concerns. These possibilities highlight one of the disturbing aspects about proposals to make behavioral scientists financially self-sufficient through clinical practice. A psychologist who spends 80% of her or his time in traditional patient care may be rendering excellent services to these patients, but is contributing little to the education of residents or the scholarly advancement of the field of family medicine.

In contrast, others have advocated a collaborative model (10, 13, 18), which emphasizes mutuality of roles and is egalitarian in nature. This model, which has much to recommend it and should definitely be included as one dimension of

the ideal educational model, focuses on such clinical issues as the integration and application of the biopsychosocial paradigm, and on such fiscal issues as parity in billing and hospital privileges. In general, it appears to be a resolutely patientfocused model in which two equal professionals come together to resolve the health care problems of the patient. The advantages of this model are that it emphasizes a team approach and is truly interdisciplinary in nature. It provides for meaningful teaching activities. It also trains both physician and behavioral scientist to work with the other, and to appreciate more fully the interdisciplinary dimensions of health care.

However, this model frequently does not focus on the day-to-day substance of family medicine (that is, interdisciplinary approaches to "regular" family practice patients). Cases in which true collaboration is practical more often present themselves on the in-patient service (for example, the chronically ill or dying patient), or through the complexities of the "difficult" patient. It has been observed that collaborative models, while stretching the professional imagination of the physician, often restrict the family therapist to clinically familiar cases and situations (13). Such an approach potentially threatens the concept that behavioral scientists have relevant input to offer on more prosaic levels of patient care as well (for example, the apparently "typical" prenatal patient). Further, it is a model that tends to regard the patient as the primary focus of concern, rather than the field of family medicine itself.

For these reasons, the ideal academic training model should also incorporate a major teaching role for the behavioral scientist in which he or she functions as an internal consultant/therapist to the system of family medicine. In this role, the behavioral scientist has permission to

confront systemic realities and to speak unpopular truths, whether in teaching or patient care. According to this conceptualization, in many instances the family medicine resident legitimately retains primary responsibility for a given patient. The behavioral scientist may make concrete suggestions about patient psychosocial management, but primarily is present to keep the physician honest, to remind him or her of alternative realities coexisting with the dominant ones of the medical system. As a faculty member, similar contributions may be made at the larger curricular level as well. This possibility of being "therapist to the system" may wax and wane, depending on need, but it commits family medicine to an ongoing, self-reflective process with the goal of maintaining its unique orientation in the face of a persistent strongly biomedical paradigm. A faculty presence that legitimizes this role allows for innovative, although perhaps unpopular, contributions at all developmental levels of family medicine.

In academic family medicine, faculty must be concerned not only with direct patient care, but also with advancement of the field and the training of the next generation of physicians. These exigencies demand a model that is self-reflective, analytical, and able to incorporate innovation and successful experimentation in a systematic and rigorous fashion. The existence of an individual who is assigned significant responsibility for promoting such processes within the department will certainly advance these goals. As mentioned earlier, a physician could theoretically also fulfill this role. But for the reasons outlined, the behavioral scientist's role as outsider may best position him or her to pursue such functions within the department.

Finally, the ideal educational model must include the potential for collaborative research, as another expression of interdisciplinary dialogue and productivity. In this sphere, balance and mutual respect are also essential. The behavioral scientist should not be consigned to the role of helpful handmaiden, facilitating the agendas established by busy physicians; nor should he or she commandeer the position of overcontrolling director, capitalizing on methodological expertise or relatively greater protected time for research activities. Rather, the goal is to establish an interactive partnership focused on uncovering and articulating research questions of importance and meaning for family medicine.

In summary, three viable options for a creative and productive interface between family physicians and behavioral scientists in academic settings include (a) clinical collaboration regarding difficult patient management, (b) systems consultation to examine existing paradigms, and (c) cooperative interdisciplinary research. For a nonphysician to make this kind of major commitment to another field, it cannot be as a purely external colleague (3). For the collaboration to be rich and deep, the behavioral scientist must have a stake in family medicine as a specialty. The behavioral scientist must be willing, like a family therapist, to join with the family of family medicine and, like the anthropologist, to enter into rather than merely observe the culture of family medicine. This means opportunities to compete for positions in family medicine faculties that have equivalent prestige, compensation, and influence, including tenure-track positions, such as those available to physicians.

### **Behavioral Scientist Skills**

In fulfilling the above model, there are essentially three skills that should characterize the well-trained behavioral scientist:
(a) clinical, (b) consultative/pedagogical, and (c) research. Presumably, most behavioral scientists already are reasonably well-prepared in these areas—but as psy-

chologists (or family therapists, or anthropologists, or social workers). As has been observed elsewhere, the skills of what Dym and Berman (11) call the "primary care therapist" require a different work style and clinical focus from those of traditional psychotherapists, as well as an understanding of both family systems and medical systems (17).

Thus, in terms of psychotherapy, it is important to identify the specific approaches needed in working with patients who define their problems as primarily medical rather than psychological. It is also crucial to expand one's psychotherapy skills to become comfortable with nontraditional patients: noncompliant diabetics, patients with terminal cancer, and so on. Regarding the development of consultation skills, behavioral scientists must learn to work specifically with physicians (rather than educators, or business executives). Even more specifically, it is necessary for behavioral scientists to be familiar with the history and philosophy of family medicine.

In terms of teaching, behavioral scientists also need to understand the difference between large group lecture and the special kind of teaching/supervision that typically occurs in a busy family practice clinic. They must master teaching approaches that respect residents' natural discomfort with and defenses against the introduction of alternative practice paradigms. Finally, research skills must be shaped and modulated: to ask questions and apply methodologies that are meaningful to family medicine agendas (5, 8) rather than to agendas absorbed in graduate school.

In this process, a metagoal exists as well: the socialization of the behavioral scientist to the field of family medicine. Ideally, behavioral scientists will develop a commitment not only to particular patients or residents, but to the discipline of family medicine as a whole. The value in postulating this metagoal is based on the assumption that not only family physicians but also nonphysicians can make meaningful contributions to and advance the state of knowledge in this field.

#### **SUMMARY**

In a haphazard and intuitive fashion, a special relationship has developed between family physicians and behavioral scientists. This relationship is now in danger as the result of fiscal pressures and, in certain quarters, a perception of diminishing need. The current model, like any model, inarguably suffers from limitations and imperfections. However, it has several aspects that deserve respect and admiration. The systematic inclusion of individuals of different professional backgrounds at the faculty level is a structural arrangement without parallel in any other field. This interdisciplinary acknowledgment at the core of the specialty has guaranteed behavioral scientists an important voice in its evolution. The functional uniqueness of the behavioral scientist's role as internal consultant/ therapist to the system also has insured a strong commitment to the specialty's historical "counterculture" roots. For the behavioral scientist to continue to fill the "gadfly" role, he or she must be reconciled to the advantages and difficulties of being the perpetual outsider. By the same token, academic departments must continue to be willing to include behavioral scientists, not only on an occasional basis as the need (perceived by physicians) arises, but also in the daily intimacies and challenges of clinical practice, education, and research, which comprise the evolving process of the field of family medicine.

#### REFERENCES

 Atkinson, B.J., & Bailey, A.G. The systemic alternative: A departure from psychoanalytic assumptions regarding health, illness, and therapeutic change. Working

- Together: A Collaborative Health Care Newsletter 1: 17–19, 1986.
- Bassoff, B.Z. Collaboration in primary care:
   Or is it? In R.S. Miller (ed), Primary
   health care: More than medicine. Englewood Cliffs, NJ: Prentice-Hall, 1983.
- Beaber, R.J., Rodney, W.M., Rumelt, E., & Firman, G.J. Psychotherapy consultation and referral: An overview of available modalities. Continuing Education for the Family Physician 20: 513–522, 1985.
- Bishop, D.S., Epstein, N.B., Gilbert, R., van der Spuy, H.I.J., Levin, S., & McClemont, S. Training family physicians to treat families: Unexpected compliance problems. Family Systems Medicine 2: 380– 386, 1984.
- Bloch, D.A. The family therapist as health care consultant. Family Systems Medicine 2: 161-169, 1984.
- 6. \_\_\_\_\_. A tale of two styles. Family Systems Medicine 4: 3, 1986.
- Candib, L.M. Ways of knowing in family medicine: Contributions from a feminist perspective. Family Medicine 20: 133– 136, 1988.
- Culpepper, L. Family medicine research: Major needs. Family Medicine 23: 10–14, 1991.
- 9. Cummings, N.A. Prolonged (ideal) versus short-term (realistic) psychotherapy. *Professional Psychology* 8: 491–501, 1977.
- 10. Doherty, W.J., & Baird, M.A. Family therapy and family medicine: Toward the primary care of families. New York: Guilford Press, 1983.
- Dym, B., & Berman, S. The primary care health team: Family physician and family therapist in joint practice. Family Systems Medicine 4: 9-21, 1986.
- Engel, G.L. The need for a new medical model: A challenge for biomedicine. Science 196 (No. 4286): 129-136, 1977.
- 13. Glenn, M.L. Toward collaborative familyoriented health care. Family Systems Medicine 3: 466-475, 1985.
- 14. \_\_\_\_\_, Atkins, L., & Singer, R. Integrating a family therapist into a family medical practice. Family Systems Medicine 2: 137–145, 1984.
- 15. Hochheiser, L.I., & Chapados, J. Training family physicians to treat families: What

- is done and what is needed. Family Systems Medicine 3: 476–480, 1985.
- Kuzel, A.J. Naturalistic inquiry: An appropriate model for family medicine. Family Medicine 18: 369–374, 1986.
- 17. Mandelbaum, E.K. The family medicine consultant—Reframing the contribution of medical social work. Family Systems Medicine 2: 309-319, 1984.
- McDaniel, S., & Campbell, T.L. Physicians and family therapists: The risk of collaboration. Family Systems Medicine 4: 4–8, 1986.
- McWhinney, I.R. "An acquaintance with particulars." Family Medicine 21: 296– 298, 1989.
- Merenstein, J.H., & Schulte, J.J. The STFM Task Force on Residency Curriculum for the Future: A residency curriculum for the future. Family Medicine 22: 467–472, 1990.
- Ransom, D.C. A sense of purpose for teaching behavioral science in family medicine. Family Systems Medicine 3: 494–499, 1985.
- 22. \_\_\_\_\_. Development of family therapy and family theory. In C.N. Ramsey, Jr. Family systems in medicine. New York: Guilford Press, 1989.
- 23. Ross, J.L., & Doherty, W.J. Systems analysis and guidelines for behavioral scientists in family medicine. *Family Medicine* 20: 46–50, 1988.
- Sargent, J. Physician-family therapist collaboration: Children with medical problems. Family Systems Medicine 3: 454
  465, 1985.
- 25. Schon, D.A. Educating the reflective practitioner. San Francisco: Jossey-Bass, 1987.
- 26. Smith, D.M. Different portraits of medical practice: Model conflict in training physicians to "think family." Paper presented at the conference on "Family and Health: A Research Agenda for the Next Ten Years," Calgary, Canada, Spring, 1990.
- Stein, H.F. The money taboo in American medicine. Medical Anthropology 7: 1-15, 1983.
- Stephens, G.G. Family medicine as counterculture. Family Medicine 21: 103–109, 1989.