Family Medicine and Family Therapy: Comparative Development, Methods, and Roles

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Family medicine and family therapy have evolved separately, but the fields are now increasingly in contact with each other. Today's family physician needs a deeper grasp of their similarities and differences. This paper compares the two disciplines in terms of their (1) membership criteria for treatment, (2) considered appropriateness for treatment, (3) contractual process, and (4) evolution of membership over time. Also explored are the disciplines' notions of illness and change; their differing attitudes toward technique are analyzed as well.

Family therapists and family physicians appear likely to have increased exposure to one another. As they do, common approaches may develop, and conceptual differences may present a mutual stimulus for growth and change.

While the field of family medicine was busy establishing legitimacy vis à vis the specialties during the 1970s, its sister field, family therapy, was rapidly becoming the leading edge in psychotherapy. With few exceptions the development of each field occurred separately with minimal crossover. Most family medicine departments and family practice residencies had little contact with family therapy as a discipline; the behavioral science components of family medicine training depended mostly on local conditions. Psychiatry, psychology, and social work-varying according to which was most collaborative in a given location-each provided approaches to the psychological aspect of family practice. Curriculum development and consultation were strongly influenced by whichever behavioral scientists had cast their lot with any given family medicine department.

With the formation of family therapy institutes in almost every major city, and with the availability of family therapy training in many graduate programs in psychology, social work, and counseling, many patients¹ and physicians² alike have had at least a passing introduction to the ideas and meth-

Requests for reprints should be addressed to Dr. Lucy Candib, Family Health and Social Service Center, 875 Main Street, Worcester, MA 01610. ods of family therapy. With few noteworthy exceptions, the family therapy institutes maintained a wary distance from the medical establishment.

One exception, the Philadelphia Child Guidance Center, under the direction of Salvador Minuchin, became increasingly involved with "psychosomatic families," tackling the previously medically defined problems of asthma, juvenile-onset diabetes mellitus, and anorexia nervosa with family systems theory and methodology.^{3,4} Subsequently, others have begun applying a family systems model to a variety of illnesses, both elaborating theory to explain the appearance and exacerbation of illness and developing techniques of intervention.5,6 While some recent work has been done in collaboration with specialist physicians, the role of the physicians has usually been defined through the application of the medical model to exacerbations of the disease process.

The other important exception is the simultaneous and linked development of both family medicine and family therapy at McMaster University, where Epstein, Levin, and Bishop, all psychiatrists, elaborated and taught the "McMaster Model of Family Functioning" to medical students, family practice and psychiatry residents, and practicing family physicians.^{7,8} Epstein and Bishop, who

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have continued teaching this model in family medicine, directly address the unique needs of the family physician for a simple family assessment method. Such a method must be applicable in an office setting, teachable to physicians, and open to evaluation.⁹ Their description of the theory and methodology of this model is widely available to students of family medicine in Medalie's *Family Medicine—Principles and Applications*.¹⁰

Despite these advances, however, family practice departments and residencies have, on the whole, made little headway in systemic curriculum development in family assessment and family treatment.¹¹ The family medicine literature has paid relatively scant attention to the relevance of family therapy, while the behavioral science contribution to recent family medicine literature has paid more attention to the delineation of roles and the development of brief but helpful techniques than to the construction of mutually useful theoretical constructs or models.^{12,13}

A number of authors have developed descriptive models of family functioning14,15 that do not imply any specific treatment approach on the physician's part. Other contributions¹⁶ describe the practicality of therapy techniques-sitting down with the entire family, communications modeling, task setting. The divergence between theoretical models and practical techniques is partly answered by Bullock and Thompson,¹⁷ but again technique becomes the primary focus. The physician should "identify and alter dysfunctional behavior patterns," which include scapegoating, labeling, and triangling. Lack of success in this work should point the physician toward referral. An underlying assumption that family physicians can and should do family therapy begins to emerge, but the questions of appropriate training and the assessment of outcome are not answered.

In her comprehensive review of family systems teaching in family medicine, Christie-Seely¹¹ identifies the difficulty of moving from the medical model of consultation to a family systems model. She develops five principles to facilitate teaching this concept, focusing on familiar models to teach new ideas. Her work stresses the practical need for family physicians to be skilled in family assessment and includes a reassuring sharp division between family practice and family therapy.

In family medicine settings, a number of possible constructive stances toward family therapy have now evolved:

1. Family physicians can apply family systems concepts in their own practice.

2. Family physicians should know enough about family therapy to assess and refer families appropriately.

3. Family physicians can learn to do family therapy.

4. Family physicians can work collaboratively with family therapists.

All of these options require the family physician's familiarity and comfort with the systems approach to illness and with the theory and methods of family therapy.

Clarification of the shared assumptions and explicit differences between the two fields can help the family physician avoid dogmatism and choose the stance most consistent with his or her own philosophy and practice. At the same time, the emergence of new theories and methods in the rapidly growing field of family therapy makes generalization hazardous. When possible, this paper will emphasize the range of possibilities that a physician might encounter in family therapy modalities.

Comparisons Between Family Medicine and Family Therapy

Membership Criteria

Family physicians may see one, some, or all family members. At any given visit, the number of members may vary. Any arrangement is legitimate, unless it is thought to reflect family dysfunction. For instance, a mother and father may bring one or all children, mother or father may bring an individual child, either parent may come alone or together, an adult may bring his or her aging parent or grandparents, or an elderly couple may come together. If, on the other hand, a husband or wife always comes with the spouse and never permits the other privacy, or a parent does not permit an older child or adolescent some time or space alone with the physician, the physician might be likely to object to the family's structuring of the visit. Many family physicians would make an explicit request about family participation to handle this problem.

The family's pattern of engaging in medical care—who brings whom, who is left out, which family members appear in league with others—is intuitively acknowledged by the family physician. On the other hand, some frequent limitations to the understanding of the entire family include the use of different physicians for different members and economic constraints on patient attendance for office visits.

Family therapists, on the whole, prefer to work with the entire family, both conceptually and strategically. Cases abound in which no progress was made until the "missing member" was brought in. Some therapists may invite neighbors, clergy, or other community members into the treatment arena. Some therapists prefer working in the presence of small children for at least part of the time^{18,19} because of the revealing interactions between the parents and children. The youngest child may serve as a barometer of family interaction. Other therapists prefer to work mainly with the older children and the parental pair. When a child is the "identified patient," the therapist may strive to help the parents redefine the problem as a family problem. Moving from a focus on the child to a concern with hidden conflicts between the parents represents progress in this setting.

With regard to membership, family therapists follow different theoretical paradigms and cannot be uniformly characterized. Bowen, for instance, despite a three-generational model of family dysfunction, holds it legitimate to work with a single member, since any change in the web of relationships will affect others.²⁰ When Minuchin's concepts of enmeshment and disengagement⁴ are part of the theoretical construct of the therapist, the entire family participates in the treatment, at least until the overall pattern surrounding the symptomatic behavior has emerged. Once the matrix of alliances is clear, however, work can proceed with any grouping of family members thought to be appropriate. In general, it is reasonable to say that most family therapists today work with all family members, except, possibly, small children. There is a tendency in some schools to move the treatment toward a focus on the parental pair after the resolution of the presenting symptom.

Appropriateness

In the broad philosophical sweep of family medicine, all families are held to be appropriate for treatment by the family physician. Even when an individual member needs specialty care, the treatment of the whole family remains with the family physician. Although some clinicians may try to limit their individual practices to given categories of patients (those who pay the bills, show up on time, obey instructions, do not smoke or overeat²¹), most family physicians accept even "difficult patients" (who do not fall into the above categories) as part and parcel of their work. Attempts to exclude patients from treatment by family physicians meet with great resistance given that *acceptance* of the patient is one of the central tenets of family medicine.^{22,23}

In the broadest construction of family therapy theory, family therapy is also always appropriate. All families demonstrate the principles of family interaction, and all families change and experience stress (which Haley²⁴ has construed as the result of conflict from simultaneous membership in different coalitions). Family therapy is, therefore, applicable to any problem arising in the family system that either family members or clinicians may identify. Nevertheless, although the problem may be appropriate, the family may not be ready. Family cooperation has now become the sine qua non of family treatment. The ability to contract with the therapist is the hallmark of family readiness. A referred family may be considered "inappropriate" if they cannot participate in the contract.

Contracting

Contracting is a useful skill already taught as part of behavioral science in family medicine.²⁵ Contracting might be used in setting up a series of counseling sessions or in working with a suicidal patient or with an abusive parent. Contracting is usually done within the context of a known family as an explicit statement between the physician and patient that they agree to engage in a specified task, different from the more amorphous and unspecified nature of uncontracted interactions. Nevertheless, uncontracted interactions often characterize the relationship between the family and the family physician. Unspoken expectations govern the complaints family members will offer and how they expect the physician to deal with them. Both family members and physician may carry hidden agendas with clashing priorities. The consequence or inconsequence of the rules of conduct for the medical encounter^{26,27} may spell success or failure for the therapeutic endeavor. When agreement on rules of conduct cannot be reached, a symptom may persist as "stuck" or a family may depart from the practice. Exposing

these agendas and negotiating the priorities jointly are a prerequisite to contracting for the family physician.

Establishing the contract is one of the first tasks in which the family engages jointly with the therapist. It plays an obvious role in some schools of family therapy (where a written contract may be signed by both parties),^{8,9} whereas it may be quite understated in others. It is, however, a cornerstone of family therapy treatment, the necessary precedent for later "assignments" or "homework" in the therapist's maneuvers. The rules of conduct are set down by the therapist, contingent upon the family's acceptance of the contract. This contractual relationship is necessary for the short-term focused work of the therapist in contrast to the ongoing assumed relationship of the family physician to the family.

Membership Over Time

Family physicians and family therapists use time differently. The commitment of the family physician to the family extends over long time periods, often dealing with as many as five or six generations in one physician's lifetime. Over decades, multiple, brief, and sometimes frequent encounters occur with some or all family members. (Huygen²⁸ has developed a notational system to document these events.) Patterns of illness have been noted to cluster around family rites and crisis points-death of a parent, departure of a child, loss of a job.29-31 However, family patterns of medical visits differ from one family to another³²; each family must be investigated in its own right. It is not uncommon for a patient to leave the practice for a period of years only to re-enter later; nor is it unusual for a timely comment by the family physician to go unanswered for months until at one visit, quite ingenuously, the patient takes it up as if it were a conversation just left a few scant seconds before. As Balint noted,³³ one of the values in the family physician's role is the capacity to follow the family members over time, ministering to various needs, ultimately, perhaps, confronting the "core" issue when the patients are ready.

Family therapists, on the other hand, usually make a relatively short-term commitment to a family, typified by the contract for a given number of sessions. In general, each of these sessions is longer than most family physicians' visits, although some family physicians have, in fact, incorporated the idea of "longer sessions" into their practices. The brief nature of the therapist's involvement creates a sense of intensity and urgency. The family presents itself to "work" on a problem: the structure of therapy impels them to do just that. An exception to this model is offered by Epstein and Bishop,⁷⁻¹⁰ who have worked extensively with family physicians. They integrate the concept of long-term follow-up into family treatment by scheduling visits as long as six months or a year after the main group of sessions. Their use of time in family treatment is compatible with the practice of family medicine and renders their model particularly appealing for family physicians.

The Etiology of Illness

Systems theory is the central theoretical underpinning of family therapy.³⁴ It is undergoing significant and rapid transformation today, from its beginnings in communications theory,²⁷ to a focus on structure,³ and later to an attempted integration with psychodynamic formulations.^{20,35} Recent developments include "paradoxical" intervention^{36,37} and the "evolutionary" approaches, influenced by the views of writers in the physical sciences.³⁸⁻⁴⁰ The interested reader is referred to Hoffman's monumental analysis³⁴ of these trends for a fuller account of the field's growth.

In general, family therapists today are opposed to "linear" thinking about illness and prefer instead to view symptoms and outbreaks of erratic behavior in terms of a "circular" field. The medical theorist who most closely approaches this concept is George Engel,^{41,42} whose formulation of a biopsychosocial model of illness integrates systems theory and medical practice. Rather than viewing a psychosomatic symptom as "caused" by this or that tension or even by the family set of conflicts, contemporary family therapists view the symptom as "fitting" the family system, intelligible in terms of the system's structure, values, and ongoing process, and indicative of attempts both to hold the family together (homeostasis)²⁴ and to bring new, creative input to it (discontinuous transformation).43

Simply put, family therapists agree that symptoms should be placed in the family context and that responses to illness must take the family's dynamic patterns into consideration. This is why, after all, families should be treated as a whole, much like the family physician's insistence on regarding the family as the "unit of health care." In contrast to the organic model of disease, where the presence of a symptom prompts the search for a cause, the family therapist does not engage in a search for the etiology of a symptom. Instead, family therapists supply motivation for families to enter treatment through concern about symptoms and the effect of these symptoms on the family.

In contrast, family medicine pursues a more eclectic understanding of causality, reflecting its current lack of overriding theoretical perspective. Some physicians in family medicine adhere to a more biomedical model. Others are eager to integrate the biomedical model with a psychosocial approach, as some of the founders of family medicine have suggested.^{22,44} Christie-Seely¹¹ describes the typical paradigm of multiple causality that predominates in the absence of any other governing concept. Much controversy continues to surround the debate over the "correct" perspective to be structured into family medicine curriculum and practice. The dispute is far from settled.

Following the model of multiple causality, stylistic and intellectual *preference* becomes the determining factor in a physician's direction. How successful a family physician may be in responding to the various causes of illness—biological, psychological, interpersonal, social, cultural—that flow from such an eclectic approach depends greatly on the individual. Personal style, bedside manner, and firsthand knowledge of the family and community are all tools a family physician may use in grappling with multiple causality.

The Nature of Change

Family medicine construes change as development through the family life cycle, marking the milestones of major life events. The long exposure of the physician to the family through the years promotes a picture of the family as a relatively stable, slow-to-change entity, with long-term styles and dynamics. Knowledge of these stable patterns enables the family physician to interpret the meaning of symptoms more successfully: Mrs. Jones' headache carries a different significance from Mrs. Smith's.

The nature of intervention is closely tied to the understanding of the nature of change. The belief is widely accepted that the long-term involvement and presence of the physician as a participant in the family process over time helps to change the family. This long-term involvement is acknowledged as one of the greatest satisfactions of practice.⁴⁴

Family therapy proceeds from a different set of assumptions about change and intervention, assumptions that have been evolving for the past three decades. Change is more likely to occur in times of crisis, when families are motivated and when patterns of family defenses are weakened by stress. The crisis reveals the inability of the family's usual coping mechanisms to deal with the stress. The family therapist enters the family system to help it effect a therapeutic change. Technique is therefore central. The family therapist will tend to be quite active compared with psychoanalytically oriented individual therapists. Any crisis can be a springboard for a change; if there is no crisis, it may be useful for the therapist to create one. Change in the family takes place as a result of change in behavior. Understanding or insight is not necessary for change.

Such assumptions are clearly at variance with the prevailing assumptions of family medicine. They may be viewed with hostile derision, bemusement, or dismay or may be greeted as refreshingly energetic. Huygen,²⁸ who integrated family therapists into his 30-year-old practice in Holland, offers:

Family therapists proved to be a kind of adventure for us general practitioners. I often held my breath and was impressed by the risks that were taken. The family therapists challenged and rated our patients higher than we were used to doing as their general practitioners.

Therapeutic Technique

Technique is one aspect of family therapy that varies greatly from one school to another. It involves interventions the therapist might make in the family's presence and instructions given to the family to carry out at home. Such instructions may be "paradoxical" or obvious in their intention.37 Paradoxical instructions are perhaps the most foreign element of technique to family physicians who are used to telling patients what they want them to do, not what they do not want them to do. Yet the frequent failure of patients to follow instructions suggests that physicians may benefit from studying strategies developed by therapists. In fact, one indication for the application of family therapy might be when medical treatment is not working. Although compliance continues to be a matter of much discussion in medicine, reasons for noncompliance have barely been probed in the literature on the subject.

Family medicine has mixed attitudes toward technique. On the one hand, family physicians have an honest aversion to what is sometimes seen as manipulation of patients by therapists. On the other hand, family physicians may wholeheartedly embrace a technique without respect for or an understanding of its underlying theory.

Examination of the criticism of manipulation reveals an inconsistent pose on the part of the critic. Every intervention, even nonintervention, is intended to have an effect. Techniques that are at times decried as "manipulative" are consciously designed to bring about an anticipated therapeutic effect. On the other hand, techniques that physicians are more accustomed to using are also intended to effect hoped-for responses, but are applied less self-consciously and are, therefore, considered "natural" rather than "manipulative." The distinction between the two applications of technique lies in the contrast between deliberate conscious choice and spontaneous intuitive response. Clearly both applications must have a role in treatment.

A close look at the concept of honesty in clinical interaction reveals another inconsistency. Despite concern about patients' rights, many physicians still find it necessary to equivocate, demur, avoid topics, give half-answers, and otherwise deal obliquely and arbitrarily with family questions. Throwing stones at therapists for using paradoxical or cloaked maneuvers will only further increase the distance between the disciplines. Rather, family physicians can learn when it may be a useful technique to demur, to procrastinate, or to obfuscate, and when to prescribe a medication or bit of behavior with the knowledge that the family might go along with it and thereby get better or stoutly oppose it and thereby get better.

One aspect of therapeutic technique important and common to both family medicine and family therapy is entry into the family. For the therapist entry is an early event, as is contracting, that permits the therapist to challenge the family later. Entry may be a form of accommodation, such as adapting to the clothes or language of the family; it may involve identifying oneself as having some language or culture, experience or value in common with the family. To the family physician, entering the family means that the relationship between physician and family members has qualities of family relationships: affinity, intimacy, reciprocity, and continuity as outlined by Carmichael.⁴⁵ Because of the privileged intimacy, but significant power, of the family physician within the family, extreme care is needed in the formation of any alliances with family members. Hazards include alienating other family members, sowing distrust, and augmenting pressures to split the family. Family therapists, on the other hand, may make frequent use of shortterm alliances^{18,46} to strengthen some family members' positions and to effect a change on the closeness or distance of members to one another.

Both family physicians and family therapists practice a kind of neutrality, the family physician in nonalliance, the family therapist in a form of detachment from the family as a whole. However, the practice of empathy and caring by the family physician is ultimately neutral in remaining involved in the needs and hurts of each family member. The therapist practices a detachment from those very needs and hurts in order to create change in the system that produced them.

Some practitioners, in attempting to integrate two fields, have preferred to make a distinction between "working with families" and "doing family therapy."⁹ Others see an orderly progression to the training a given physician may choose to pursue in family systems, up to and including family therapy.⁸ The former position appears semantic but may be politically expedient. The latter begins to address the possibility of competency-based yet individualized training in behavioral science for family physicians. Both positions, however, insist on the need for family systems theory to inform the discipline of family medicine.

Prospects for the Future

Family physicians are receiving increasing exposure to family therapy theory and technique during residency. Family therapists are increasingly interested in illness and its effect on the family. Their shared concerns provide the basis for either destructive competition or fruitful collaboration. Some potential destructive scenarios include the following: The family therapist might prefer consulting with specialist physicians in a family with an illness because the physician will defer entirely to the therapist in the behavioral realm. The ther-

apist can then scorn the physician's organicity. Or the family physician may see the family therapist as yet another specialist trying to limit what he or she is qualified to do. The physician may then decry the therapist's detached, uncaring, manipulative methods. Such territoriality on both parts reveals insecurity over identity with resultant competition for the central role.

An emerging alternative structure for family physicians and family therapists is a collaborative model. In favor of collaboration is the emergence of hard evidence showing that family therapy applied in a family practice setting can lower the frequency of office visits and use of psychoactive drugs.^{25,47} Some family physicians following Huygen²⁸ are now integrating family therapists into their regular office practice. Family therapists are turning toward family physicians for consultation on somatic symptoms. It is possible that these two movements may find that their commonalities outweigh their differences and that their differences present a mutual stimulus for growth and change.

References

1. Malcolm J: The one-way mirror. The New Yorker 54:39, 1981

2. Family therapy: When the whole family needs your

care, roundtable. Patient Care 8:172, 1974 3. Minuchin S, Baker L, Rosman BL, et al: A conceptual model of psychosomatic illness in children. Arch Gen Psy-

chiatry 32:1031, 1975 4. Minuchin S, Rosman BL, Baker L: Psychosomatic

Families. Cambridge, Mass, Harvard University Press, 1978
5. Selvini-Palazzoli M: The families of patients with

anorexia nervosa. In Anthony EJ, Korpernick C (eds): The Child in His Family. New York, John Wiley, 1970 6. Grolnick L: A family perspective of psychosomatic factors in illness. Fam Process 11:457, 1976 7. Epstein NB, Levin S: Training for family therapy

within a faculty of medicine. Can Psychiatr Assoc J 18:203, 1973

8. Epstein NB, Bishop DS, Levin S: The McMaster model of family functioning. J Marr Fam Counseling 4:19, 1978

9. Epstein NB, Levin S, Bishop DS: The family as a

social unit. Can Fam Physician 22:1411, 1976 10. Medalie J (ed): Family Medicine—Principles and Applications. Baltimore, Williams & Wilkins, 1978 11. Christie-Seely J: Teaching the family system con-cept in family medicine. J Fam Pract 13:391, 1981

12. Wales E: Behavioral scientist meets the practicing physician. J Fam Pract 6:839, 1978

13. Shapiro J: A revisionist theory for the integration of behavioral sciences into family medicine departments.

J Fam Pract 10:275, 1980 14. Smilkstein G: The cycle of family function: A conceptual model for family medicine. J Fam Pract 11:223, 1980

15. Hoebel FC: Brief family-interactional therapy in the management of cardiac-related high-risk behaviors. J Fam Pract 3:613, 1976

16. Dayringer R: Family therapy techniques for the family physician. J Fam Pract 6:303, 1978 17. Bullock D, Thompson B: Guideline for family inter-

viewing and brief therapy by the family physician. J Fam Pract 9:837, 1979

18. Ackerman N: The Psychodynamics of Family Life. New York, Basic Books, 1958

19. Minuchin S: Families and Family Therapy. Cambridge, Mass, Harvard University Press, 1974

20. Bowen M: Family Therapy in Clinical Practice. New York, Jason Aronson, 1978 21. Wehlage DF: The non-medical contingencies of

evaluation. Fam Med 13(2):3, 1981

22. Stephens GG: The intellectual basis of family prac-tice. J Fam Pract 2:423, 1975

23. Candib L: An interview with G. Gayle Stephens, MD. Fam Med 13(6):3, 1981 24. Haley J: Toward a theory of pathological systems.

In Zuk G, Boszormenyi-Nagy I (eds): Family Therapy and Disturbed Families. Palo Alto, Calif, Science and Behavior Books, 1969, pp 11-27

25. Conroe RM, Cassata DM, Racer HJ: A systematic approach to brief psychological intervention in the primary care setting. J Fam Pract 7:1137, 1978

26. Mechanic D: The Growth of Bureaucratic Medicine: An Inquiry Into the Dynamics of Patient Behavior and the Organization of Medical Care. New York, Wiley-Interscience, 1976

27. Bloom SW, Wilson RN: Patient-practitioner rela-tionships. In Freeman HE, Levine S, Reeder LG (eds): Handbook of Medical Sociology, ed 2. Englewood Cliffs,

NJ, Prentice-Hall, 1972, pp 315-338 28. Huygen FJA: Family Medicine: The Medical Life History of Families. Nijmegen, The Netherlands, Dekker & Van de Vegt, 1978

29. Rahe RM, Meyer M, Smith M, et al: Social stress and illness onset. J Psychosom Res 8:35, 1964 30. Parkes CM: Effect of bereavement on physical and

mental health. Br Med J 2:274, 1964

31. Engel GL: A life setting conducive to illness-a psychological setting of somatic disease—the giving-up-given-up complex. Bull Menninger Clin 32:355, 1968

32. Peachey R: Family patterns of stress. Gen Pract

27:82, 1963 33. Balint M: The Doctor, His Patient and The Illness. New York, International Universities Press, 1972

34. Hoffman L: The Foundations of Family Therapy. New York, Basic Books, 1981

35. Paul N: The Role of Mourning and Empathy in Con-joint and Marital Therapy. In Zuk G, Boszormenyi-Nagy I (eds): Family Therapy and Disturbed Families. Palo Alto,

Calif, Science and Behavior Books, 1969 36. Watzlawick P, Weakland JH, Fisch JR: Change: Principles of Problem Formation and Problem Resolution.

New York, WW Norton, 1974 37. Selvini-Palazzoli M: Paradox and Counterparadox. New York, Jason Aronson, 1978 38. Dell PF, Goolishian HA: Ordnung durch Fluktuation:

Eine evolutionäre Epistemology für menschliche Systeme. Familiendynamik 6:104, 1981

39. Prigogine I: Structure, dissipation and life. In Marois M (ed): Theoretical Physics and Biology. Amster-dam, North Holland Publishing, 1969, pp 23-32 40. Platt J: Hierarchical growth. Bull Atomic Scientists

2(9):2, 1970

41. Engel GL: The need for a new medical model: A challenge for biomedicine. Science 196:129, 1977

42. Engel GL: The clinical application of the biopsychosocial model. Am J Psychiatry 137:535, 1980 43. Elkaim M: Non-equilibrium chance and change in

43. Erkann M. Norrequinibitian enables and enables and family therapy. J Marital Fam Ther 7:291, 1981
44. Carmichael LP: The family in medicine, process or entity? J Fam Pract 3:562, 1976
45. Carmichael LP: The relational model—A paradigm (1) 1000

of family medicine. J Fla Med Assoc 67:860, 1980

46. Whitaker C: Psychotherapy of the absurd. Fam Proc

14:1, 1975 47. Comley A: Family therapy and the family physician. Can Fam Physician 19:78, 1973