

A Conceptual Model of Psychosomatic Illness in Children

Family Organization and Family Therapy

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Linear and open systems (multiple feedback) models of psychosomatic illness in children are contrasted in terms of their implications for cause and treatment. An open systems family model is presented that describes three necessary (but not independently sufficient) conditions for the development and maintenance of severe psychosomatic problems in children: (1) a certain type of family organization that encourages somatization; (2) involvement of the child in parental conflict; and (3) physiological vulnerability. Predisposition for psychosomatic illness, symptom choice, and maintenance are discussed within this conceptual framework. We report on family therapy strategies based on this model and the results of family treatment with 48 cases of "brittle" diabetes, psychosomatic asthma, and anorexia nervosa.

In a century, the study of psychosomatic illness, which began with the simplest accumulation of clinical anecdotes, has evolved to the use of the most sophisticated techniques of laboratory and behavioral science. Speculation based on the hypothesis that certain psychological dynamics are specific to certain somatic diseases has been replaced by systematic studies of the complex interrelationships of psyche and soma. Many important contributions have been made in interpreting the mediating mechanisms whereby emotions cause bodily changes.

Unfortunately, this progress in understanding the causes of psychosomatic syndromes has not invariably been accompanied by increased effectiveness in treatment.

It is our contention that both research and therapy in psychosomatic medicine have been severely handicapped by the prevailing conceptual model of psychosomatic illness. This linear model links the individual's life situations to his emotions to bodily illness, in a causal chain. But the illness is seen as contained within the individual. Consequently, research and treatment approaches are focused on the individual, and this is far too limited a target.

Research governed by the linear model has made many important contributions to the study of the central nervous system, the autonomic nervous system, and the endocrine system, as well as to the study of how these systems respond to emotions. These investigations range from the very early studies of Cannon,¹ who showed the physiological accompaniments of fear and rage, to the more sophisticated study of Mason.²

The personality structure of the psychosomatically ill patient has also been intensively explored under the aegis of the linear model. Dunbar³ made early observations on whose basis a personality specific theory of psychosomatic disease was formulated. Similarly, Ruesch⁴ defined an infantile personality as a basic problem in psychosomatic illness.

Some investigators began to look past the field circumscribed by the artificial boundary around the individual. Alexander and French^{5,6} expanded the focus of their investigations to include the onset situation. They believed that the individual's situation at the time of onset, coupled with the personality of that individual, was critical in the development and maintenance of psychosomatic symptoms. Mirsky⁷ and Weiner and co-workers⁸ introduced the concept of social stress into their formulations. They studied the interrelationship of constitutional factors, psychological predisposition, and social stress in the precipitation of psychosomatic illness. Holmes and Rahe⁹ extended the study of life stresses epidemiologically, relating major life stresses to the onset of serious illness.

Some researchers focused on the relationship between the stressful situation, the response to stress, and the development of the symptom. Wolff¹⁰ was able to provide substantial evidence for the relationship of environmental stressors to physiological changes. Hinkle and Wolf¹¹ studied the relationship of life stresses to fluctuations in diabetic control, tying the situation and the way the individual coped with that situation into an analysis of the physiological response to that stress. Grinker and Robbins¹² also explored the relationships between external stresses and individual emotions.

Senay and Redlich,¹³ in a broad review of the topic, drew attention to the variety of social contexts that influence the emergence and patterning of psychosomatic illness. These contexts range from the largest scale-differing cultures to intermediate subcultural or social-class related environmental phenomena to small groups, such as the family. These authors consider disturbances within the familial context to be the most intimately linked to psychosomatic illnesses.

Many investigators have explored the family context in their search for explanations of psychosomatic illness, particularly in children. A disturbed mother-child relationship has frequently been postulated as an etiological factor.^{5,6,14} Ulcerative colitis has been studied extensively from this point of view, and particular family constellations have been observed to be associated with this illness.^{15,16} Many authors have focused on disorganizing events within the family, particularly the loss of important persons.¹⁷⁻¹⁹ Myer and Haggerty²⁰ and Schmale²¹ were

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able to cite family disturbances preceding the onset of illness in their studies of large numbers of patients. Pinkerton²² has studied the interaction of parental attitudes with the personality structure of the asthmatic child, and his schematic representation of his model^{22 (p16)} could be a paradigm for the sophisticated exploration of the juvenile patient's family context.

However, therapy based on the linear model has retained the focus on the individual. Individual personality factors are seen as major determinants of psychosomatic illness, and as a logical corollary, the therapeutic focus is on the individual. The importance of the individual's context is recognized, but there has been a curious dearth of therapeutic attempts to modify that context. This is particularly striking in the case of children who can be assumed to be deeply involved with some form of family group. Yet the child is apparently seen as a passive recipient of noxious environmental influences. Consequently, the general therapeutic response has been only to separate him from those influences, either by individual psychotherapy, or by behavioral therapy, or "parentectomy." All of these treatment approaches place the burden of change on the patient alone.

In the past decade, we have begun to look beyond the individual to the individual in his social contexts and to the feedback processes between individual and context. As a result, a less restricted conceptual model, here called the open systems model, is evolving. It has directed investigators to a better understanding of psychosomatic syndromes and to the discovery of more effective treatment techniques.

Pinkerton's²³ work with asthmatic children represents a transitional phase. His evaluation of the impact of family stress on the child has resulted in therapeutic efforts at "identifying and ultimately resolving the underlying aura of tension or [promoting] a more favorable adaptation to it. . . ."^{23 (p19)}

Mara Selvini-Palazzoli,²⁴ an Italian psychiatrist who reported on the treatment of over 60 anorectic children, more specifically exemplifies this change in the field. When she began her clinical work with anorexia, she concentrated on the relationship between the sick child and the pathogenic mother. Later, she began to wonder, "could [anorexia nervosa] be the only possible means of psychic survival for a given subject in the context of a given type of family functioning? . . . The mere fact of becoming aware of the existence of the problem led me to adopt the new work methods. . . ."^{24 (p321)} She began to insist on seeing all the members of an anorectic child's family together. Approaching the problem in this way, she discovered that there were family components quite directly and specifically related to the anorexia syndrome, and that these could be modified by family therapy.

THE OPEN SYSTEMS MODEL

Broadening the focus from the sick child to the sick child within the family redefines the nature of pathological disorder and the scope of therapeutic change. This shift is facilitated by a conceptual model that postulates (1) that certain types of family organization are closely related to the development and maintenance of psychosomatic symptoms in children, and (2) that children's psychosomatic symptoms play a major role in maintaining

family homeostasis. In the open systems model, a psychosomatic crisis is held to consist of two phases that encompass both psychological and physiological measurements. There is the "turn on" phase: some family conflict situation induces emotional arousal in the child, triggering physiological response. Then there is the "turn off" phase, or return to base line levels. Turn off may be handicapped by the nature of family members' involvement with each other around the conflict. Since family interactions affect the psychophysiology of the child in the psychosomatic crisis, disorder is seen as situated in the feedback processes of child and family. The artificial boundary between individual and context no longer handicaps therapeutic efforts. These can be directed toward the child, the family, and the feedback processes of the family system's transactional patterns in whatever combinations seem most promising.

In other words, family interactional patterns may trigger the onset or hamper the subsidence of psychophysiological processes, or both. The resulting psychosomatic symptoms function as homeostatic mechanisms regulating family transactions. Therefore, therapy must be directed toward changing the family processes that trigger and maintain the child's psychosomatic symptoms and toward changing the use of these symptoms within the family.

This concept of the open systems model is not dissimilar from one discussed by Mishler and Waxler^{25,26} in their review of different etiological models of psychopathological disorder such as schizophrenia. They describe a nonlinear system maintained through a variety of feedback mechanisms so that single causal sequences cannot be identified. The complexity of such a model could account for the lack of verified simple relationships between family constellation and psychopathological disorder, including psychosomatic illness. It is important to note that the hypotheses we are advancing here do not imply symptom specificity in relation to a given family constellation; rather, we will describe a more general type of family process that encourages somatization. Within this conceptual scheme we do not suggest a single or simple etiological factor but describe a cluster of important related determinants.

THE FAMILY MODEL

Our work studying and treating families of psychosomatically ill children has led to the development of an exploratory model of the structure and functioning of such families. This model holds that three factors in conjunction are necessary for the development of severe psychosomatic illness in children. First, the child is physiologically vulnerable; that is, a specific organic dysfunction is present. Second, the child's family has the following four transactional characteristics: enmeshment, overprotectiveness, rigidity, and lack of conflict resolution. Third, the sick child plays an important role in the family's patterns of conflict avoidance; and this role is an important source of reinforcement for his symptoms.

Vulnerability

The diabetic and asthmatic children we have treated are so defined by pediatric evaluation. The presence of physiological vulnerability in anorexia nervosa is debatable, but we have followed the literature in treating it as a psychosomatic disease.

It may be important to distinguish here between "primary" and "secondary" psychosomatic symptomatology. In primary psychosomatic symptomatology, a physiological disorder is already present. These include metabolic disorders like diabetes, allergic

diathesis such as that found in asthma, and so forth. The psychosomatic element lies in the emotional exacerbation of the already available symptom. In the "secondary" psychosomatic disorder, no such predisposing physical disorder can be demonstrated. The psychosomatic element is apparent in the transformation of emotional conflicts into somatic symptoms. These symptoms may crystallize into a severe and debilitating illness like anorexia nervosa.

Symptom choice may be differently determined in these two instances. However, our work indicates that the "psychosomatic" family organization described here is applicable across these varieties of psychosomatic illness.

Family Transactional Characteristics

The four characteristics—enmeshment, overprotectiveness, rigidity, and lack of conflict resolution—can be observed in a family's behavior during family testing, diagnostic interviews, and in family therapy sessions. They appear to be representative of a general type of family organization and functioning. (A description of the family task may be found in *Families of the Slums*.²⁷ The diagnostic interview is discussed in *Families and Family Therapy*.²⁸)

Enmeshment

A pathologically enmeshed family system is characterized by a high degree of responsiveness and involvement. This can be seen in the interdependence of relationships, intrusions on personal boundaries, poorly differentiated perception of self and of other family members, and weak family subsystem boundaries.

In a highly enmeshed family, changes in one family member or in the relationship between two reverberate throughout the family system. Dialogues are rapidly diffused by the entrance of other family members. A dyadic conflict may set off a chain of shifting alliances within the whole family as other members get involved.

Internal structures within a highly enmeshed family system are characteristically fluid. The boundaries that define individual autonomy are so weak that an individual's life space is impinged on. This may be reflected in lack of privacy, excessive "togetherness," and sharing. ("Why do you change the furniture around in my room all the time when I'm not there?" a 15-year-old complains to his mother.) Family members also intrude on each other's thoughts, feelings, and communications. One family member may relay messages from another family member to a third, blocking direct communication. Often there are many interruptions; family members may finish each other's sentences.

Problems of enmeshment are also reflected in family members' poorly differentiated perceptions of each other. Parents asked to tell what they like about each of their children often can speak of them only as a group.

In enmeshed families, subsystem boundaries are weak and easily crossed. As a result, executive hierarchies are confused. Children may join one parent in criticizing the other. Often the children take inappropriately parental roles toward each other. In the absence of a clearly defined and effective parental subsystem, it is common for the parents to work at cross purposes in relation to the children. Often a parent enlists a child's support in struggles with the other parent.

Overprotectiveness

In families with a psychosomatically ill child, family members show a high degree of concern for each other's welfare. This concern is not limited to the identified patient or to the area of illness. Nurturing and protective responses are constantly elicited and supplied as family members interact. A sneeze sets off a flurry of handkerchief offers; complaints and queries about fatigue or discomfort punctuate the flow of communications. Critical remarks and demands are often accompanied by pacifying behaviors. Signs of distress frequently cue family members to the approach of dangerous levels of tension or conflicts. For example, a mother's weeping as she anticipates father's criticism may galva-

nize the children into distracting behavior. A symptomatic child's emotional outburst may elicit comforting and help to avert exploration of family conflicts.

Family member's perceptions of each other are structured around protective concerns, particularly where there is a sick child. (When family members are asked to tell what pleases them and displeases them the most about each other, they may for example reply, "I like it when you don't overdo." "I like it when you rub my chest." "I don't like it when he gets sick all the time.") In such families, the parents' overprotectiveness retards the children's development of autonomy and competence. (A father tells his two adolescent diabetic daughters, "If Mommy and I could only take the needles for you, everything would be alright.")

In turn the children, particularly the psychosomatically ill child, feel great responsibility for protecting the family. For the sick child, the experience of being able to protect the family by using his symptoms may be a major reinforcement for the illness.

Rigidity

The pathologically enmeshed families are heavily committed to maintaining the status quo. In periods when change and growth are necessary, they experience great difficulty. For example, when a child in an effectively functioning family reaches adolescence, his family will be able to change its rules and transactional patterns in ways that allow for age-appropriate increased autonomy while still preserving family continuity. But the family of a psychosomatically ill child operates like a closed system. When events that require change occur, family members insist on retaining accustomed methods of interaction. Consequently, avoidance circuits must be developed, and a "symptom bearer" is a particularly useful detouring route. When the family's low threshold of tolerance for conflict is approached, the sick child becomes ill, allowing family members to detour their conflict via concern for him. The family reinforces his development of deviance and rewards its continuance because of its usefulness in maintaining the pathogenic system's precarious equilibrium.

As a result of their inappropriately summoned homeostatic mechanisms, these families live in a chronic state of submerged stress. Issues that threaten change, such as negotiations of individual autonomy, are not allowed to surface to the point where they could be explored. Typically, these families represent themselves as normal and untroubled except for the one child's medical problem. They deny any need for change in the family.

Lack of Conflict Resolution

The rigidity and overprotectiveness of the family system, combined with the constant mutual impingements characteristic of pathologically enmeshed transactional patterns, make such families' thresholds for conflict very low. Often a strong religious or ethical code buttresses and provides a rationale for avoiding conflict. As a result, there can be no explicit negotiation of differences. Problems are left unresolved, to threaten again and again, and continually activate the system's avoidance circuits.

Each family's idiosyncratic structure and functioning dictate their ways of avoiding conflict resolution. Often one spouse is an avoider. The nonavoider brings up areas of difficulty, but the avoider always manages to detour confrontation that would lead to the acknowledgement of conflict and, perhaps, its negotiation. A man may simply leave the house when his wife tries to discuss a problem.

Other families bicker continuously, but the constant interruptions and subject changes typical of an enmeshed system obfuscate any conflictual issue before it is brought to salience. Other families simply deny the existence of any problems whatsoever.

The four transactional characteristics typical of families with psychosomatically ill children—enmeshment, overprotectiveness, rigidity, and lack of conflict resolution—provide the context for using illness as a mode of communications.

The Use of the Sick Child

The third condition postulated in this family model is that the ill child plays an important role in the family conflict avoidance, and that this is an important source of reinforcement for his symptoms.

The results of our experimental work using a controlled interview designed to elicit parental conflict in the index child's presence suggest that there are characteristic patterns of conflict-related behavior that involve the child and affect him in different ways. Families commonly move into several of these patterns in the course of the interview, but one tends to predominate. These conflict avoidance patterns have been grouped according to whether they facilitate or handicap turn off.

Three patterns of involvement seem to handicap turn off severely, and, therefore, are related to psychosomatic illness. In the first two patterns, triangulation and parent-child coalitions, the spouse dyad is frankly split. The child is openly pressed to ally with one parent against the other. In *triangulation*, the child is put in such a position that he cannot express himself without siding with one parent against the other. Statements that impose coalition, such as "wouldn't you rather do it my way?" are used in the attempt to force the child to take sides. (For example, one demonstrative father was finally able to express his covert criticism of his wife, accusing her of coldness to the children. Both parents then pressed their anorectic daughter to say whether she preferred her father's ways and wanted her mother to change. Stuck between the two adults, she was unable to speak.) In the second pattern, *parent-child coalition*, the child tends to move into a stable coalition with one parent against the other. The role of the excluded parent varies to the degree that he tries to disrupt the coalition. (A mother was unable to express her rage that her husband refused to protect her from his mother's attacks. The asthmatic son was highly involved as the mother's protector, and he could state her complaints. He urged his father to protect her from her mother-in-law. The father tried to persuade his son to reject the mother's "childish" demands, but the wheezing boy maintained his adult stance.)

In the third type of pattern, called *detouring*, the spouse dyad is united. The parents submerge their conflicts in a posture of protecting or blaming their sick child, which is defined as the only family problem. In several such families, the parents required that the children reassure them that they were good parents, or join them in worrying about the family. The parents occasionally vacillate between their concerns for the child and exasperation over the burdens he imposes by "not trying to help himself." In most cases, parental concerns absorb the couple, so that all signs of marital strife or even minor differences are suppressed or ignored.

It is important to note that these patterns of involvement are not intended to represent a classification of families. They describe transactional sequences occurring in response to family conflict. Such sequences often occur in the transactions of effectively functioning families; they are within the wide range of methods used to cope with conflict. However, families in the normal range can shift into other modes of conflict confrontation and negotiation. The rigid families with psychosomatically ill children are more likely to enact maladaptive sequences again and again. As they are usually operating under conditions of stress and tension, the child is frequently involved in his role as avoider circuit.

To summarize, we hypothesize that the family with a psychosomatically ill child is characterized by the transactional patterns of enmeshment, overprotectiveness, rigidity, and lack of conflict resolution. The sick child is involved in parental conflict. We have been testing this model in three ways. First, we are comparing the interactional characteristics of families with psychosomatically ill children with those of families with nonpsychosomatic but chronically ill children. Second, we have designed a structured family interview that permits the physiological assessment of family members' responses to psychological family stress. The assessment of turn on and turn off is of particular interest. We will present our

data in these two areas in other communications. In this report, we will address ourselves to our third test, the examination of whether or not changing the specified family behavior patterns through structural family therapy results in improved management and substantial alleviation of psychosomatic symptoms.

FAMILY THERAPY PROGRAM— METHODS AND RESULTS

Over the past seven years, this team has been involved in an interdisciplinary research project designed to identify the elements of family structure and functioning that are related to the development and reinforcement of psychosomatic symptoms in children. A concomitant program of family therapy oriented toward changing these elements of family organization has treated children with anorexia nervosa,²⁸⁻³⁰ children with superlabile diabetes (psychosomatically triggered recurrent ketoacidosis),^{31,32} and children with intractable asthma.³³ Almost all these children were seriously ill at the time of referral. The anorectic group had suffered a mean weight loss of 30%; the diabetic group had an average of 12 hospitalizations a year; and most of the asthmatic group were steroid-dependent. All patients described were diagnosed as psychosomatic and referred for family therapy on the basis of independent pediatric criteria rather than psychiatric evaluation. Hospital admissions for the *superlabile diabetic* group were occasioned by severe bouts of ketoacidosis; chronic acetonuria patients were diagnosed on the basis of daily urine testing as well as symptoms. In all cases, careful screening and control studies were carried out under pediatric supervision to rule out other physiological disorders and instances of insulin omission. Similar criteria were applied during follow-up. Similarly, in the case of the *asthmatic* patients, independent pediatric assessment by members of an allergist team verified the physiological severity of the illness and the necessity for special treatment (ie, steroid therapy) prior to psychiatric referral. School loss for diabetic and asthmatic children was determined on the basis of pediatric chart review and was directly related to incidence of medical symptoms; improvement in this area reflected true symptom remissions. *Anorectic* patients were diagnosed solely on the basis of medical criteria, ie, severe weight loss and amenorrhea, after other medical conditions were ruled out. In evaluating recovery, major emphasis again was placed on pediatric criteria (weight gain). The only psychiatric evaluation of recovery may be seen in the clinical assessment of the anorexia group and was based on behavioral rather than psychological data. Families were referred to the study group and for family therapy by the pediatricians and were free to receive treatment without participating in the study, or to refuse referral and remain in pediatric care only. Pediatricians and family therapists worked in close collaboration throughout the treatment period.

The results of this pediatric-family therapy treatment approach have been highly encouraging, as may be seen in Tables 1 through 4.

Dramatic improvements or remission of psychosomatic symptoms or both, have been achieved in most of these cases. We believe that the effectiveness of our therapeutic procedures can be traced to the use of the open systems model of psychosomatic illness in the development of therapeutic strategies. This conceptualization directs the therapist's attention toward the context in which the

Table 1.—Summary of 13 Cases of Superlabile Diabetes

Case No.	Presenting Problems	Family Treatment, mo	Follow-Up
1*	30 hospital admissions in 3 yr	9	4 admissions in 3 yr 8 mo, 3 associated with infection
2*	14 hospital admissions in 2½ yr	5	No admissions in 2 yr 4 mo
3*	35 hospital admissions in 20 mo	9	1 admission in 3 yr 1 mo
4*	18 hospital admissions in 4 yr	12	No admissions in 5 yr 11 mo
5*	24 hospital admissions in 20 mo	9	No admissions in 6 yr 7 mo
6*	6 hospital admissions in 6 mo	9	No admissions in 2 yr 6 mo
7*	20 hospital admissions in 2 yr	7	No admissions in first 4 yr 7 mo, 2 admissions in past 21 mo
8†	Recurrent ketosis, nausea, & frequent school absence	3	Free of recurrent ketosis, no associated school absence 2 yr 8 mo
9†	Chronic acetonuria, 6 hospital admissions in 2 yr to evaluate poor diabetic control, & frequent school absence	9	2 hospital admissions in 2 yr 3 mo; free of chronic acetonuria, school attendance excellent (2 days' absence per year)
10†	Poor diabetic control, & 1 hospital admission for vomiting and 3 for diabetic regulation in 1 yr	3	Good control, no vomiting for 2 yr, last contact 1 yr 9 mo, no problems reported
11†	Chronic acetonuria, headaches, nausea, & vomiting for 12 mo	5	Acetonuria well controlled, 1-day absence for vomiting, no problems for 4 yr 6 mo
12*	15 hospital admissions in 4 yr	15	No admissions in 15 mo
13†	Lethargy, nausea, vomiting, frequent school absence, & 3 hospital admissions in 3 yr to evaluate poor diabetic control	2	For first 6 mo, less frequent nausea & school absence, 1 incident poor control associated with cold; for past 20 mo, no problems, good control

* One of eight cases of severe relapsing diabetic acidosis.

† One of five cases of chronic acetonuria.

psychosomatic event was initiated and is maintained. Therapeutic strategies are directed toward modifying that matrix.

DEVELOPMENT AND MAINTENANCE OF PSYCHOSOMATIC SYMPTOMS

The open systems model explicitly differentiates the symptom choice, the precipitating event, and the maintenance of the symptom in its current manifestation. Our framework of analysis is similar to that suggested by Redlich and Freedman³⁴ for the cause of psychosomatic illness. This framework requires elucidation of the predisposing factors (biological, psychological, and environmental), precipitating events, the homeostatic importance of the symptom, and the consequences for the patient in terms of limitations in coping and growth. Our orientation in this case is to explicate the cause in terms of the family system.

Symptom Choice

Symptom choice is related to the family history and organization. Frequently, other members of a family have psychosomatic complaints. Hypochondriacal fears and excessive concern with bodily functions are common. In the secondary psychosomatic disorders, symptom choice may relate to family members' excessive preoccupation with normal areas of bodily functions. In families with an anorectic child, other family members often worry about table manners, become overconcerned with diet, have food fads, and so on. In the primary psychosomatic conditions, a child with a physiological vulnerability grows up within a family system that uses his illness as a point of concentration or as a method of diffusing system stresses, or both. For instance, the allergic diathesis of asthma is a true physiological condition. However, only some of the children thus affected grow up in a family that encourages and maintains psychosomatic responses. It is this group

who develop attacks that challenge medical management. In other words, in the primary cases symptom selection is determined by the physical illness; in the secondary cases, symptom selection is idiosyncratic for each family. In contrast to psychodynamic workers, we are less concerned with the specifics of symptom selection and analysis of the symptom does not form a basis for therapy.

We have found that in both cases the child grows up in a family organization that is fertile ground for the development and utilization of the symptom. The child's autonomy is curtailed by the other family members' intrusive concern. Areas of his psychological and bodily functioning remain subject to others' control long after they should have become automatic or unattended, or both. This control is maintained under the cloak of concern and protection, and, therefore, cannot be challenged without impugning the motives of the concerned one.

Denial of self for others' benefit and high value for self-sacrifice and family loyalty characterize the context in which the child develops. Family members make their wishes known indirectly and "unselfishly"—"I want this because it is good for you." Initiative and competence in areas not dictated by the family become acts of betrayal. The concern for mutual accommodation without friction produces an environment in which differences are submerged.

Precipitating Event

This pattern of family homeostasis with its emphasis on loyalty, protection, and avoidance of conflict is challenged at different stages of family and family members' development, particularly in those normal developmental crises in which family members must make life decisions about issues that threaten the stability of the family unit. This unavoidable disequilibrium is frequently the *precipitating event* for the psychosomatic episode. All the family members are mobilized to protect the system and to protect or

Table 2.—Summary of Ten Cases of Intractable Asthma

Patient No.	Referral Time: Sex-Age, yr	Age at Onset	Steroid Dependent	Clinical Severity, Grade*	Duration Family Therapy	Current Status, Grade*	Follow-Up Posttherapy
1	F-8	3 yr	Yes	3	7 mo	1	2 yr 8 mo
2	F-12	3 yr	Yes	3	6 mo	1	2 yr 2 mo
3	F-12	15 mo	Yes	3	9 mo	1	1 yr 8 mo
4	M-16	11 yr	No	3	5 mo	1	3 yr 2 mo
5	M-14	18 mo	Yes	4	22 mo	2	2 yr 2 mo
6	M-8	6 yr	Yes	3	8 mo	1	1 yr 2 mo
7	M-11	3½ yr	Yes	3	6 mo	1	2 yr
8†	F-11	1 yr	Yes	3	11 mo	1	1 yr 11 mo
9	M-12	18 mo	Yes	4	Ongoing	2‡	10 mo
10	F-6	6 yr	No	2	Ongoing	1‡	9 mo

* Pinkerton (1970) Scale for Evaluation of Clinical Severity of Asthma³⁷: Grade 1, no school loss, mild attacks, occasional need for use of bronchodilator; grade 2, days off school, mild to moderate attacks, need for regular use of bronchodilator; grade 3, weeks off school, more prolonged and severe attacks, steroid plus bronchodilator therapy; grade 4, more than 50% school loss, persistent symptoms, need for special schooling, regular steroid therapy.

† Asthma-free for past 17 months.

‡ Treatment continuing for other problems.

coerce the member whose distress or need for change is threatening accustomed transactional patterns. The child, feeling the stresses within the system, responds with symptoms that may be utilized as a detouring mechanism. The family unites in concern and protection, and thus rewards the symptom.

At each crossroad when a family member meets conflicting demands from the familial and extrafamilial, the stress in the family may be expressed in psychosomatic terms by the sick child. A psychosomatic episode, therefore, will have different characteristics at different periods of a family's life because the family context in which the child experiences his illness is organized around different life tasks.

The developmental stages of the family in treatment has consequences for the selection of treatment strategies. For instance, when working with families in which the identified patient is a preadolescent child, the therapist will help to increase the parents' sense of competence and support their executive function. When working with families in which the identified patient is an adolescent, the therapist will challenge the parents to grow up too so that they can support the child's right to explore the extrafamilial world. In each instance, the therapist will encourage an age-appropriate differentiation of the child.

Symptom Maintenance

Once it has appeared, the psychosomatic symptom becomes embedded in but also changes the family organization. Challenged by the chronicity, the unpredictability, and the life-threatening quality of the illness, the family members respond by increasing their protective control of the sick child and by establishing strong dependency on the pediatrician. The concentration on the symptomatic child maximizes his self-appraisal as a patient, with consequent utilization of his illness as a substantial coin for interpersonal transactions. Parents and siblings feel exploited by the demands of the "child and his illness" and increase their controlling protection. The child feels protected and scapegoated and increases his dependency on the parenting members. If this process continues for a substantial period of time, the child may be rendered incompetent in many areas of life functioning and con-

sequently increase his dependent demands.

The change in family organization goes beyond the dynamic needs of detouring family conflict. The family feedback to the child's symptoms becomes an autonomous process that maintains the symptom.

Initial therapeutic strategies that challenge these processes may sometimes result in rapid improvements of the child's symptomatology and an additional clarification of family dynamics. For example, the therapist may concentrate on the manipulative aspect of the child's behavior, pointing out how the child controls family transactional patterns. A child who has been seen as weak and sick and in need of family protection is relabeled a disobedient child who is using his illness to control the family. The parents will then develop a demanding attitude that evicts the child psychologically from his roles in the enmeshed system. As a result of the maneuver (which may seem unfair), the child moves from an "I am sick" stance to a stance of "I am controlling the situation." This increases distance between the child and the family by enhancing his autonomy.

Such a maneuver also challenges the family's conflict avoidance patterns. The child and parents begin to enter into areas of conflict, and these become the center of therapy. This strategy has been successful in a number of cases of anorexia where the child's control of his symptom is more apparent. In other cases, the strategies of concentrating on the behavior of other siblings who transitionally become the sick members serves initially to move the child out of the central position. Intertwined with these strategies, the basic therapeutic procedure is directed toward changing the four characteristics of the family system: enmeshment, overprotection, rigidity, and lack of conflict resolution.

It is beyond the scope of this report to describe the many particular techniques employed; these have been elaborated on elsewhere (Minuchin^{28,35}; Minuchin and Barcai³²; and Liebman et al^{33,36}). Rather, our concern has been to outline the therapy approach in relation to the open systems family model developed above.

Therapy with many families with psychosomatic children supports our impression that when family organization is changed, the psychosomatic child improves greatly.

Table 3.—Characteristics of 25 Anorectic Patients Prior to Participation in Family Therapy Program

Patient No.	Age at Onset, yr-mo	% Weight Loss	Interval: Onset-Referral	Therapy Previous to Admission to this Program
1	9-0	32	2 mo	None
2	13-9	32	3 mo	1 yr individual therapy; 2 weeks inpatient
3	9-0	26	2 mo	None
4	11-8	30	2 mo	None
5	15-0	42	9 mo	1 yr inpatient; 2 yr psychiatric outpatient
6	13-1	26	18 mo	None
7	12-0	36	2 weeks	None
8	14-4	23	1 yr	None
9	15-5	56	27 mo	2 mo psychiatric ward; individual psychiatrist & social worker
10	14-2	30	6 mo	None
11	14-0	42	15 mo	None
12	9-5	22	3 mo	None
13	13-0	35	5 mo	Therapy
14	12-0	44	7 mo	Previous hospitalization; earlier child therapy
15	15-0	29	5 mo	Family counseling
16	16-0	28	6 mo	None
17	14-6	41	6 mo	None
Outpatients:				
18	15-0	25	1 yr	None
19	14-0	30	7 mo	Brief psychotherapy
20	13-0	39	6 mo	None
21	9-0	41	18 mo	None
22	15-6	18	3 mo	None
23	13-0	29	4 mo	None
24	12-0	Unavailable	6 mo	None
25	15-0	21	3 mo	Brief therapy with psychologist

Table 4.—Summary of Treatment and Follow-Up of 25 Anorectic Patients

Patient No.	Treatment Duration		Current Statistics				
	Inpatient, Days	Family Therapy	Weight, kg	Weight Gain	Duration Follow-up	Anorexia	Clinical Assessment*
1	11	1 yr	31.8	14.1	2 yr 9 mo	Recovered	Recovered
2	21	1 yr	50.5	17.3	2 yr 5 mo	Recovered	Recovered
3	8	4 mo	25.5	5.0	1 yr 9 mo	Recovered	Recovered
4	13	6 mo	40.9	24.1	2 yr 5 mo	Recovered	Recovered
5	16	4 mo	33.6	10.9	2 yr 5 mo	Fair	Recovered
6	15	6 mo	50.0	11.4	1 yr 2 mo	Recovered	Recovered
7	14	9 mo	35.9	14.1	1 yr 2 mo	Recovered	Recovered
8	7	10 mo	Dropped program	
9	13	3 mo	43.2	14.1	1 yr	Recovered	Recovered
10	13	7 mo	51.1	14.8	11 mo	Recovered	Recovered
11	15	Dropped program	
12	20	7 mo	28.6	10.9	1 yr	Recovered	Recovered
13	22	7 mo	39.5	9.5	1 yr	Recovered	Recovered
14	24	7 mo	51.8	18.6	2 yr 5 mo	Recovered	Recovered
15	25	6 mo	37.3	6.4	5 mo	Recovered	Recovered
16	14	9 mo to date	49.1	10.9	Continuing	Recovered	In treatment
17	14	6 mo	46.8	15.9	11 mo	Recovered	Recovered
Outpatients:							
18		1 yr	52.3	11.4	4 yr	Recovered	Recovered
19		6 mo	61.4	18.2	3 yr 9 mo	Recovered	Recovered
20		1 yr	63.6	27.7	3 yr 9 mo	Recovered	Recovered
21		2 mo	53.6	31.4	2 yr 9 mo	Recovered	Recovered
22		4 mo	46.4	10.9	2 yr 9 mo	Recovered	Recovered
23		14 weeks	46.8	19.5	1 yr 9 mo	Recovered	Recovered
24		...	35.9	9.5	...	Dropped program	
25		1 yr	52.3	16.4	Lost contact	Recovered	Recovered

* Social, school, and family adjustment.

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These conclusions are based not only on the results reported in the tables but on our work with other psychosomatic conditions, ie, psychogenic vomiting, headaches, gastrointestinal disorders, and so forth.

Independent verification of changes in our patients' family organizations must await the final analysis of data from our current study. However, we believe that evaluation of family therapy outcomes, as indicated by pediatric improvement as well as improvement of other adjustment problems, offers support for the conceptual schema underlying the goals and strategies employed within this framework.

In conclusion, we have explored the importance of a theoretical model in framing a methodology of research and treatment. A conceptual model maps areas for exploration, but it tends to limit data collected to those data that fit within the framework of the model. Psychosomatic medicine has been handicapped by an inadequate model that focuses on the individual and does not take into account the transactions in a patient's life context. This gap in the model may account for much of the inadequacy of previous treatment techniques.

It has been suggested that the open systems model of psychosomatic illness is a more effective guide to explora-

tion and therapy. This circular model does not preclude work with physiological mediating mechanisms, pharmacological, and biofeedback intervention techniques based on better understanding of these mechanisms. These techniques may be easily incorporated into the open systems framework.

A number of points have been highlighted in our presentation. First, interventions that modify the life context of the psychosomatically ill patient seem to achieve a faster and more sustained remission than interventions that focus exclusively on the individual. The need for prolonged hospitalization for nonphysiological reasons disappears because the patient will move from the controlled institutional environment to a natural environment that is changing according to therapeutic goals. The model of the psychosomatogenic family pinpoints dysfunctional areas within the child's most important life context, short-cutting much of the necessary exploration and opening areas for intervention. This knowledge of family organization and functioning predisposing to psychosomatic problems can also be used in preventive programs.

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