

Somatization in Family Practice: A Biopsychosocial Approach

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The family physician sees many patients who present physical symptoms that have primarily an emotional or psychosocial basis. This paper defines the concept of somatization, reviews its prevalence and consequences, and develops a conceptual model of somatization that includes cultural, childhood, psychological, and environmental factors. Physicians and the medical care system play a significant role in reinforcing somatization by patients. A biopsychosocial approach to the clinical assessment, diagnosis, and management of these patients is presented along with case examples that exemplify the utility of this approach.

The patients whose chief complaints are non-specific physical symptoms and whose biomedical evaluations reveal little or no organic pathology are well known to all physicians. Many terms have been used to describe these patients, for instance, "the worried well," "hypochondriacs," and "crocks." It is the purpose of this paper to describe more clearly this phenomenon and to outline a practical approach to the diagnosis and management of these patients.

Definition and Prevalence

Somatization can be defined as the articulation of emotional problems and psychosocial stress by way of physical symptomatology (ie, backache,

headache, fatigue, dizziness, malaise). Patients who somatize either have no discernible organic disease and recurrently present with physical complaints or have verifiable organic problems but amplify their symptoms and are frequent users of physicians' services. As a group, these patients make up a significant proportion of visits to a primary care physician. This well-known fact is the basis of the adage in family practice that 20 percent of a practice will take up 50 percent of the physician's time.¹

Somatization is encountered in a wide variety of clinical settings. It is seen in many psychiatric disorders, including depression, anxiety neurosis, Briquet's syndrome (or somatization disorder, formerly hysteria), hysterical reaction, factitious illness, malingering, and hypochondriasis. It is also encountered frequently in chronic pain disorders, "psychophysiological reactions," and as a coping response to stressful life events.²⁻⁴ Among traditionally oriented ethnic patients, members of fundamentalist religious groups, and less educated working class members, somatization may provide a socially sanctioned cultural idiom for expressing personal and interpersonal "troubles" of many

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different types as well as an effective means for manipulating social relationships.

While no studies have clearly defined the incidence or prevalence of somatization in a primary care setting, inferences can be made from a review of the literature. Studies have shown that as many as 50 percent to 75 percent of patients utilizing primary care clinics have psychosocial precipitants as opposed to biomedical problems as the main cause of their visit.⁵⁻⁷ Psychiatric disorders make up a significant proportion of problems seen in primary care. A study in a Wisconsin primary care clinic found the incidence of mental disorders to be 26.7 percent in that adult population.⁸ In the Virginia study, "Content of Family Practice," it was found that depression and anxiety neurosis were among the 15 most frequent diagnoses, and that physical disorder of masked psychogenic origin ranked number 26.⁹ In an English study of a large group of family physicians, only 54 percent of the mental illnesses present among their patients was detected.¹⁰ These studies add credence to numerous other studies which have estimated the incidence of mental disorders in primary care to be between 15 percent and 50 percent and have shown that 87 percent of these were affective and psychophysiological disorders (ie, depression, anxiety states).^{8,11,12}

While these studies give some estimate of the prevalence of mental disorders, the incidence of somatization is still unclear. An English study found that among patients diagnosed with a mental disorder, over 50 percent presented with somatic symptoms at the outset.¹³ Widmer and Cadoret determined in a study of depression in a midwest family practice that in the seven months prior to the diagnosis of depression, patients had an increased number of office visits and hospitalizations, and the subjects presented complaints of three types: (1) ill defined functional complaints, (2) pain of undetermined origin (ie, head, abdomen, extremities), and (3) "nervous" complaints.¹³⁻¹⁵ In a study of his family practice Collyer discovered a subgroup of high-use families who required 20 percent of physician's services and 32 percent of physician's time. Depression and anxiety were diagnosed in 89 percent of the families, and "psychosomatic illnesses" were present in the vast majority. Practicewide, patients with emotional and "psychosomatic illnesses" required 28 percent of his services and 48

percent of his time.¹⁶ Studies with chronic pain patients have shown a high incidence of depression despite the lack of depressed mood as a complaint.^{17,18} Overall, it has been shown that patients with mental illness utilize twice as much nonpsychiatric medical care.¹⁹

From these studies it is clear that somatization is seen frequently as a part of psychiatric disorders in primary care. The prevalence and incidence of chronic pain disorders and psychophysiological disorders probably well exceed that of affective disorders. Thus while the true prevalence of somatization remains unknown, it is of significant proportions.

In order to more fully understand somatization and its clinical manifestations, it is necessary to look at it from a broader perspective. Somatization can be viewed as one response by an individual to stressful stimuli. These stimuli may be external (environmental or social) or internal (psychological or physiological). The individual's response to these stimuli is influenced by many factors, including psychological, family, and socio-cultural variables, as well as the nature of the stimulus itself (Figure 1).

Etiologic Factors

Psychological and Personality Factors

Intrapersonal factors play an important role in determining how an individual copes with stressful stimuli. Age and developmental stage are significant. Children and adolescents have been found to somatize frequently;²⁰⁻²³ elderly patients with significant cognitive impairments are likely to somatize when faced with stressors,²⁴ as are elderly depressed patients.²⁵ Patients differ markedly in their degree of "psychological mindedness"; those with little will often substitute somatic preoccupation for a dysphoric affect. Personality themes are also important; the somatizing personality has been described as showing three themes: (1) masochism with chronic guilt and the view of illness as punishment, (2) hostility with a sense of having been wronged, and (3) excessive interpersonal dependency and demandingness.²⁶ While somatization may be seen in any personality type, it is more common with histrionic, narcissistic, dependent, compulsive, and masochistic types.

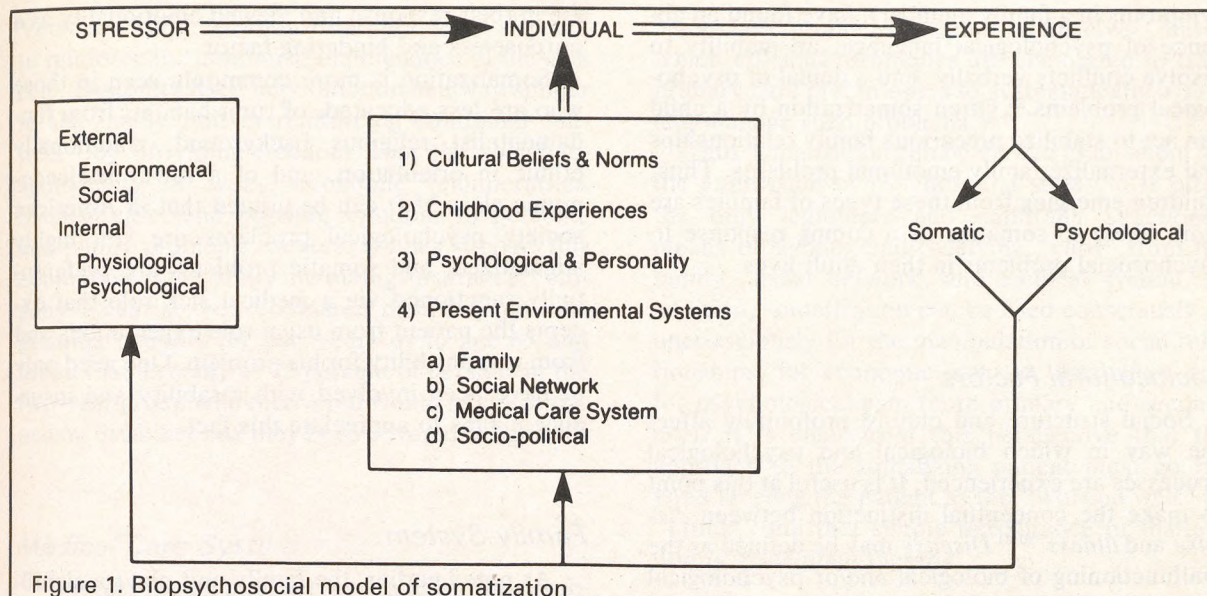


Figure 1. Biopsychosocial model of somatization

Psychological stress indeed is often the precipitant of the encountered symptomatology. Loss, separation, and intrapersonal and interpersonal conflict can act as potent stressors for the individual. Stress causes autonomic hyperactivity, with release of epinephrine and cortisol and internal monitoring of bodily sensations. Finally, the psychiatric disorders mentioned earlier often have somatic complaints as their primary manifestation. For example, patients with depression and anxiety neurosis may experience the associated physical symptoms with little or no psychological component. Thus the depressed patient will complain of fatigue, aches, decreased energy, and so on, while denying being "depressed," and the patient with anxiety neurosis will complain of heart pounding, dizziness, sweating, a lump in the throat, and so on, while denying being anxious.

Family Factors

Each family unit has different norms and rules for coping with problems, including emotional

ones. It is within this social unit that the child learns appropriate responses to his environment, his social world, and his inner feelings. Children are unable to distinguish between physical and psychological distress, and it is only through the reaction of adults that this distinction can be learned.^{27,28} In many families, somatic ills may elicit nurturance while emotional ills may elicit little response. In fact, negative sanctions against expressing emotions may exist. In these families the child quickly learns to utilize somatic complaints to seek attention, love, and caring. As a result, emotional and physical problems become fused, and a psychological language for internal mood states will not develop.

Engel, in his work with "pain-prone" patients, found that aggression, suffering, and pain played an important role in the early family relationships of those patients who had (1) physically or verbally abusive parents, (2) parents who were excessively cold and distant but who responded when the child was sick, and (3) families where illness and pain were present.²⁶ General family therapists working with psychosomatic families (ie, those with psychological conflict that is expressed via somatic

symptoms in a family member), have found an absence of psychological language, an inability to resolve conflicts verbally, and a denial of psychological problems.²⁹ Often somatization by a child can act to stabilize precarious family relationships and externalize family emotional problems. Thus, children emerging from these types of families are more likely to somatize as a coping response to psychosocial problems in their adult lives.

Sociocultural Factors

Social structure and culture profoundly affect the way in which biological and psychological processes are experienced. It is useful at this point to make the conceptual distinction between *disease* and *illness*.^{30,31} *Disease* may be defined as the malfunctioning of biological and/or psychological processes, whereas *illness* may be defined as the perception, evaluation, explanation, and labeling of symptoms by the patient and his family and social network. Studies have shown how social factors and culture affect the ways in which individuals experience symptoms, attach labels to them, and respond to them.^{27,32} For example, cross-cultural studies on depression have shown that the vegetative symptoms of depression are similar across cultures, but the cognitive and affective components differ markedly.³³⁻³⁵ Kleinman, in his work with Chinese patients in both the United States and Taiwan, has shown that depression and other psychological problems are expressed almost entirely through the somatic idiom.³⁶ In many cultures there are no words to express internal emotional states; in others, strong sanctions against talking about and perceiving emotions exist; and in many, psychological complaints lack social efficacy.³⁶⁻³⁸

The wide variance in response to physiological and psychological stress can also be seen across ethnic, class, and family boundaries in American society.³⁹ Zborowski, in a study of hospitalized patients, found the meaning and response to pain varied among ethnic classes.⁴⁰ Italian Americans and Jewish Americans showed much more emotional response to pain than did those of northern European extraction. Interviews revealed that these emotional responses were culturally sanctioned means of eliciting sympathy and help. "Old Americans," on the other hand, were dispassion-

ate in their response and viewed emotionality as a purposeless and hindering factor.

Somatization is more commonly seen in those who are less educated, of rural habitat, from fundamentalist religious background, traditionally ethnic in orientation, and of a lower socioeconomic class.^{2,4} It can be argued that in American society psychological problems are still highly stigmatized, and somatic problems are preferentially sanctioned via a medical sick role that exempts the patient from usual role expectations and from responsibility for his problem. One need only to have been involved with disability and insurance claims to appreciate this fact.

Family System

As noted earlier, the family unit plays a significant developmental role; however, the current situational response of family members to the somatizing patient is often critical. The family may act to reinforce the somatization by granting the sick role with its attendant care, attention, and exemption from social responsibilities. If the sick role becomes chronic, a new equilibrium may develop within the family that is dependent on the patient's continued illness. For example, when the somatic symptoms of an untreated depression continue over a long period of time, a radical change may occur in family structure and function. A depressed man may be unable to work due to musculoskeletal problems, which may result in his receiving increased nurturance from the family and his wife returning to work. Possible consequences of this scenario are that the "illness" may provide an unconscious solution to chronic anxiety and tension associated with work and unmet intrapsychic needs and may provide the spouse with increased self-esteem and power. Therefore, the family may unconsciously undermine treatment that would return it to its former state of social functioning. Hence even with a "cure" of the disease, the illness may continue.

Disability System

The response of the society as a whole in the form of disability programs, such as Workman's Compensation Insurance, person injury suits, and

Veterans Administration disability, may also act to reinforce the continued maintenance of the sick role. Disability itself may function in a way similar to the family unit in reinforcing continued "illness" by providing freedom from the social responsibility of work, economic remuneration, medical care, and possible solutions to personal and family problems. Several studies support this contention. One study involving insurance company actuarial data compared disability policies granting benefits for two years or to age 65 and found that as many as 25 percent of persons in the two-year group who recovered would have continued on disability had they been covered to age 65.⁴¹

Medical Care System

Another area that deserves attention is the subculture of biomedicine. By the nature of its predominant concern with the diagnosis and treatment of somatic disorders, physicians are primarily oriented to the somatic idiom. When a patient presents somatic complaints to a physician, the emphasis is placed on ruling in or out an organic basis for the symptomatology. While this is a necessary and essential process of the clinical encounter, too often the process is completed when an organic basis is ruled out. The patient is "reassured" that nothing is wrong and is dismissed. This process not only serves to organize the patient's complaints and to further reinforce somatization but also fails to result in a meaningful diagnosis and treatment plan. The patient is still aware that he has symptoms and will continue seeking care. At an early age patients learn that in order to receive "care" from a physician, one needs physical symptoms.

Most physicians are uncomfortable dealing with psychosocial complaints, and this is communicated to patients through direct (ie, a quick referral to a mental health or social agency) and indirect (ie, directing the interview from psychosocial to somatic issues) ways. Thus it can be argued that patients are encouraged by the biomedical system to express psychological distress through somatization. What this paper argues for is a change in this socialization process; this change will require a shift from a biomedical paradigm to a biopsychosocial one in which the psychosocial and cultural dimensions of sickness are viewed as legitimate

health care problems in and of themselves, and in which efficient techniques are elaborated to train primary care practitioners to systematically assess and manage such problems.^{42,43}

Thus somatization can be viewed as an idiom for the expression of psychosocial stress; it is often the only legitimate and culturally sanctioned means of seeking and receiving "care" from the family, social network, and medical system. In addition, somatization can be used consciously or unconsciously for the manipulation of social relationships, for economic gain (ie, disability), and for psychological gain (both primary and secondary). It is clear from this perspective that the approach to the somatizing patient must go beyond labeling the patient as the "worried well" or "crock" and that simple reassurance or inattention is inadequate therapy.

Biopsychosocial Approach to Clinical Assessment

With this broader understanding of somatization, it is possible to develop a rational and orderly clinical approach to these somatizing patients. It should be emphasized at the outset that a systematic biomedical evaluation is an integral part of the diagnostic process, though alone it is inadequate.

The first step in the evaluation of the symptomatic patient is to encourage the patient to describe his problem in his own terms. The use of open-ended questions (eg, "describe the pain") as opposed to leading questions (eg, "is it sharp or dull?") is helpful. The patient's description of the symptom is often an important clue to its broader meanings; the more complex the description, the more complex are the meanings and significance. Engel found that descriptions such as boring, gnawing, biting, penetrating, crawling, twisting, and turning were important clues to somatization.²⁶ In addition to providing important information, this process demonstrates to the patient the physician's genuine concern about his illness experience, which will expedite the elicitation of other personal information.

The clinician should proceed with directed questions to fill in gaps left by the patient's description. Pertinent biomedical data must be ob-

tained. Throughout the diagnostic and treatment processes, the physician should keep in mind his understanding of the correlations between patho-anatomical and pathophysiological processes and symptomatology; an incongruity between these should alert one that psychosocial factors may be playing a primary role.

A thorough past history should be obtained and should include the presence of significant illness in the recent past or in childhood and the use of alcohol or drugs. The number of physicians consulted and medical visits made in the past year is another important clue.

Although a psychosocial evaluation is an important part of every clinical encounter, when somatization is suspected, a thorough evaluation is critical. Four areas should be assessed: psychological, family, sociocultural, and the nature of the stressors.

Psychological

Since somatic symptoms are often the presenting complaint of the psychiatric disorders mentioned earlier, it is imperative that these be considered. The two most common psychiatric disorders encountered in primary care are depression and anxiety neuroses. Merely asking a patient whether he is depressed or anxious is inadequate, since many patients lack a psychological language and will deny an altered mood state. During the encounter an assessment of the predominant mood should be made: Does the patient appear depressed or anxious? Do family and friends consider his behavior as such? If anxiety is suspected, possible worries or concerns should be explored, and the presence or absence of initial insomnia, hyperadrenergic symptoms and signs (ie, tachycardia, diaphoresis, dry mouth, tachypnea, tingling in hands and feet), phobias, and panic attacks should be ascertained. For depression it is useful to ask the patient if he has felt irritable, like crying, or hopeless, helpless, or worthless, or if he has lost interest in things that previously occupied his attention. Reports of difficulty concentrating, slowed thoughts, memory loss, and guilt are also suggestive. The biological concomitants of depression are well described and include initial insomnia and/or early morning awakening, anorexia, weight loss, loss of libido and energy, psychomotor retardation, diurnal mood and energy vari-

ation, dry mouth, and constipation; a systematic search for these symptoms is necessary. The other psychiatric diagnoses listed earlier should likewise be considered.

An assessment of the patient's predominant personality type, a search for the personality themes mentioned earlier (masochism, hostility, and dependency), and an assessment of chronic coping styles are also important. An estimate of the patient's "psychological mindedness" can be made from his language and responses to questions concerning emotions.

Family

The family of origin and the present family play a significant role in the illness experience and must be evaluated. By systematically answering the following questions concerning the family of origin, a reasonable assessment can be made. Did the patient have a parent or a sibling with a chronic illness who received special care and attention?⁴⁴ Were the parents physically or psychologically abusive? Is there a history of depression, other mental illness, substance abuse, or divorce in the family during the patient's childhood?⁴⁵ Did the patient receive nurturance only during illness, and how did the family respond to emotional and psychological problems?²⁸

For the present family it is important to discover how it responds to the patient's symptoms. Are the somatic symptoms being used to avoid intimacy or sex, manipulate a spouse or parent, get time out or off, sanction dependency or failure, or punish a spouse? Do the patient's symptoms externalize an internal family dysfunction? Is there other illness in the family? Clinical tools such as the family APGAR may be very useful in assessment of family function.⁴⁶

Sociocultural

Although sociocultural factors are complex and varied, they can be routinely evaluated by the physician. What is the patient's ethnic background? Do members of that culture predominantly somatize, and are there taboos against the expression of psychological issues? The answers to these latter questions can be answered by prior experience with that culture, by questioning the patient, family, and other members of that ethnic group,

or by consulting resources, such as Harwood's recent handbook,³⁹ or other professionals in the community.

Social class, religious affiliation and involvement, work situation, area of upbringing, and level of education should be determined. In addition, the social resources of the patient should be explored. Is the patient isolated, or are there family and close friends available? What is the quality, intensity, and frequency of social network contacts?

The social consequences of the illness are often critical. Are disability insurance claims or litigation involved? Are other secondary gains, such as monetary gain or freedom from social responsibilities or obligations, an important aspect? Questions such as, "How has this illness affected your life and your family, and how would your life be different if you were well?" are useful in eliciting information in this area.

Nature of the Stressor

Many investigators have shown the effect of life stresses on the individual.⁴⁷⁻⁴⁹ The presence of significant stresses such as the death of a spouse or parent, marriage, childbirth, relocation, or job loss or change may be playing a primary role in the present symptomatology. It is also essential to ascertain both the relative success or failure of social network supports in buffering particular stresses and the specific meanings that a given stress possesses for the patient and network.

Illness Behavior and Expectations

It is crucial to a biopsychosocial approach to understand the patient's illness from his own perspective. Symptoms may have different meanings, both conscious and unconscious, for patients, and these often differ from biomedical science. Eliciting the patient's explanatory model of his illness gives the physician knowledge of the patient's understanding of the cause, pathophysiology, expected course, and desired treatment. This model can be efficiently elicited by the set of questions outlined by Kleinman et al: (1) What do you think has caused your problem? (2) Why do you think it started when it did? (3) What does your illness do to you? (4) How severe is it? (5) What kind of treatment should you receive? (6) What results do you expect from your treatment? (7) What are the

chief problems caused by your sickness? (8) What do you fear most about your illness?³¹ Elicitation of the explanatory model not only provides important data but also serves to reinforce further the physician's concern and can act as a starting point for negotiating a therapeutic plan.

Diagnosis

From this biopsychosocial evaluation, it is possible to derive meaningful diagnoses and therefore a comprehensive therapeutic plan. It is useful to divide the diagnostic process into four parts: disease diagnoses, clinical subtypes of somatization, nature of the stressors, and an assessment of social support.

Disease diagnoses include both biomedical and psychiatric disorders. In the biomedical realm diagnoses such as angina pectoris, degenerative joint disease, peptic ulcer disease, lumbar disc disease, hypothyroidism, and so on, provide important information not only for biomedical intervention but also about likely psychosocial determinants and consequences. Common psychiatric disorders encountered, such as depressive syndrome, anxiety disorders including generalized anxiety states, panic disorder and phobias, and chronic personality disorders such as specific biomedical diagnoses enable development of definite therapeutic regimens (eg, antidepressants, antianxiety agents, biofeedback, systematic relaxation, hypnosis, psychotherapy, and family therapy).

It is useful to divide somatization into clinical subtypes. The first distinction is made between those patients with verifiable organic pathology who seem to amplify these symptoms and those patients who have no discernible organic disease. Examples are the patient with osteoarthritis who has an exacerbation of back pain when marital discord develops and the patient who presents with fatigue or malaise when no physical abnormalities can be found.

The second categorization involves dividing these patients into acute, subacute, and chronic subtypes based on natural history and expected outcome. An example of the acute subtype is the college student presenting during final examinations with tension headaches that resolve when these examinations are completed. The patient

who gives a three- to six-month history of vegetative symptoms and responds well to treatment of his depressive syndrome is an example of the subacute type. The patient with lifelong history of physical complaints and often numerous surgeries, other therapies, and physician contacts represents the chronic type. As is apparent, the acute type is usually a response to an acute environmental stressor, self-limited and requiring minimal intervention. The symptoms of the subacute type have been present for more than two months, often involve a treatable psychiatric or social problem and are reversible. The chronic type represents the chronic coping style of somatization, and though difficult to "cure," can frequently be altered and more successfully managed if systematically approached.

These clinical categories give the clinician a better understanding of the natural history, proper therapy, and management of the patient.

Third, it is useful to attempt to categorize the patient's somatization in terms of the predominant precipitants. These stressful stimuli may be external or internal. It is thus important to diagnose whether the encountered symptomatology is secondary to problems in interpersonal relationships, in the work or school arena, in the family system, or in the resolution of intrapsychic conflict. With such diagnostic clarity, one can focus therapeutic interventions appropriately.

Finally, an assessment of the patient's social support system should be made. What family members, friends, or organizations (ie, church or clubs) can be used in the therapeutic plan? This assessment should include determining if the patient's somatization is idiosyncratic, family based, or cultural, as well as what alternative idioms (eg, moral, religious, environmental, institutional) there are for communicating distress and receiving appropriate help.

Case Illustrations

Case 1

Mr. J. is a 20-year-old factory worker who presented with a three-week history of intermittent epigastric pains that had no clear relationship to meals. Review of systems and past medical history

was otherwise negative. On further questioning he revealed that the pains occurred almost entirely in the evenings and/or weekends, rarely occurring during work. The patient was of northern European extraction, and had a mother who often complained of abdominal pains. Exploration of his social situation revealed that he had been living with a girlfriend during the past 12 months, the last six months of which had been marked by numerous conflicts. He readily admitted that he was unsure whether to continue in the relationship. Physical examination was entirely normal. The patient's explanatory model was that he felt he might have an ulcer of uncertain cause requiring some sort of medicine.

The physician's formulation was a 20-year-old man with (1) dyspepsia, questionable early peptic ulcer disease, and (2) acute somatization secondary to (3) interpersonal conflict with his girlfriend resulting in ambivalence and anxiety. This formulation was presented to the patient who agreed. He was placed on antacids as needed, asked to formulate possible options for his relationship with his girlfriend, and told to return in two weeks. On his return visit, he reported a marked diminution in physical symptoms and that he had broken up with his girlfriend and felt much relieved.

Case 2

Mr. M. is a 27-year-old man who presented in the early spring and complained of fatigue and weakness after a recent upper respiratory infection associated with several days of diarrhea. Physical examination revealed several shotty cervical nodes. Laboratory evaluation revealed a normal hemogram and negative serology, throat culture, and Monospot. The patient was told that his symptoms were related to the recent viral illness and assured that he would improve. One month later he again was seen complaining of similar symptoms. Again physical examination was within normal limits. At this time chest x-ray examination, hemogram, sedimentation rate, liver function tests, and thyroid screen were normal. Several weeks later one of the authors was asked by a resident physician to see the patient. At that time history revealed several months' history of terminal insomnia, decreased appetite, diurnal mood swings, anhedonia, dry mouth, constipation, and irritability. The patient was of northern European

extraction and of Protestant background. Family history was positive for depression in a sibling. Evaluation of social supports disclosed that the patient had a woman friend and a sister with whom he was close and was also receiving support from the dance instructors for whom he worked. Further history showed he had begun dancing about five years earlier with hopes of becoming a successful performer. These goals had not been reached, and he presently was an assistant instructor with little future in a modern dance company.

The patient's explanatory model was elicited. He felt he was physically ill due to some as yet to be determined viral infection which needed some sort of medical treatment.

Our diagnosis was (1) depressive syndrome, (2) status post viral syndrome, and (3) subacute somatization secondary to intrapersonal conflict around his career and self-identity. This formulation was presented to the patient, and the biomedical and physical manifestations of depression were explained in detail. The patient agreed to a trial of tricyclic antidepressants and within two weeks showed a good clinical response. At this point he accepted psychotherapy and was referred to a local psychiatrist for ongoing therapy.

Comment

From these clinical examples it should be apparent that a purely biomedical approach to these patients was inadequate. A biopsychosocial formulation of the patient's illness not only gives the clinician a much broader understanding of the patient but also leads to a rational therapeutic plan. This plan must include appropriate biomedical therapy of existing diseases, treatment of any existing psychiatric disorders, and therapy of any significant family dysfunction. While the primary care physician is in the best position to provide the necessary treatment, often referral to other health professionals (ie, psychiatrists, psychologists), specialized clinics (ie, pain clinics) and social agencies is necessary. Each physician will vary in his interest and expertise in the treatment of various disorders and should readily consult and refer in certain areas.

A key aspect of the management of these patients is the development of a therapeutic alliance.

These patients will often perceive their problems to be secondary to isolated physical abnormalities. The physician must become adept at negotiation of discrepancies between the patient's and the physician's explanatory models.

Through negotiation it is possible that a mutually acceptable treatment plan can be agreed upon. A useful model for negotiation of physician-patient conflicts has been described by Katon and Kleinman and consists of seven stages:

1. Physician elicits the patient's explanatory model and the problems presented by the illness.
2. Physician presents in layman's terms his own explanatory model.
3. An attempt is made to develop a mutually acceptable explanatory model.
4. If an understanding cannot be reached, the physician should decide on an acceptable compromise of treatment and offer it to the patient.
5. The patient then responds to the offer and can accept, reject, or offer another treatment plan.
6. If agreement cannot be reached, referral to another physician should be made.
7. Ongoing *monitoring* of the agreement should be done by physician and patient.⁵⁰

The biopsychosocial approach outlined above offers many advantages to the physician, patient, and society as a whole. By increasing both the physician's understanding of the patient and his problems and his ability to accurately diagnose and treat, the frustration of dealing with somatizing patients can be decreased. For the patient this approach offers a greater chance for efficacious care while minimizing the morbidity of unnecessary diagnostic and therapeutic procedures. For society the cost benefits of the elimination of unnecessary services is profound.^{51,52} The clinical approach is in many ways only an outline, the specific points of which need to be further clarified and developed through clinical trials and research in this area.

Acknowledgment

This paper resulted from work supported by training grant MH 15648-01 from the National Institute of Mental Health for Clinically Applied Anthropology in Psychiatry and Primary Care.

References

1. Collyer J: Psychosomatic illness in a solo family practice. *Psychosomatics* 20:762, 1979
2. Barsky AJ: Patients who amplify bodily sensations. *Ann Intern Med* 91:63, 1979
3. Diagnostic and Statistical Manual of Mental Disorders, ed 3 (DSM-III). Washington, DC, American Psychiatric Association, 1980
4. Mechanic D: Social psychological factors affecting the presentation of bodily complaints. *N Engl J Med* 286:1132, 1972
5. Stoeckle JD, Zola IK, Davidson GE: The quantity and significance of psychological distress in medical patients. *J Chronic Dis* 17:959, 1964
6. Mannucci M, Friedman SM, Kaufman MR: Survey of patients who have been attending non-psychiatric outpatient department services for ten years or longer. *J Mt Sinai Hosp* 28:32, 1961
7. Roberts BH, Norton NM: Prevalence of psychiatric illness in a medical outpatient clinic. *N Engl J Med* 245:82, 1952
8. Hoepfer EW, Nycz GR, Cleary PD, et al: Estimated prevalence of RDC mental disorder in primary care. *Int J Ment Health* 8:6, 1979
9. Marsland DW, Wood M, Mayo F: A data bank for patient care, curriculum, and research in family practice: 526,196 patient problems. *J Fam Pract* 3:25, 1976
10. Goldberg D, Blackwell B: Psychiatric illness in general medical practice. *Br Med J* 2:439, 1970
11. Goldberg D, Kay C, Thompson L: Psychiatric morbidity in general practice and the community. *Psychol Med* 6:565, 1976
12. Goldberg D: Detection and assessment of emotional disorders in a primary care setting. *Int J Mental Health* 8:30, 1979
13. Widmer RB, Cadoret RJ: Depression in primary care: Changes in pattern of patient visits and complaints during a developing depression. *J Fam Pract* 7:293, 1978
14. Widmer RB, Cadoret RJ: Depression in family practice: Changes in pattern of patient visits and complaints during subsequent developing depressions. *J Fam Pract* 9:1017, 1979
15. Cadoret RJ, Widmer RB, North CS: Depression in family practice: Long-term prognosis and somatic complaints. *J Fam Pract* 10:625, 1980
16. Collyer JA: Psychosomatic illness in a solo family practice. *Psychosom* 20:762, 1979
17. Sternbach RA: *Pain Patients, Traits, and Treatment*. New York, Academic Press, 1974
18. Blumer D, Heilbronn W, Perdraza E, Pope G: Systematic treatment of chronic pain with antidepressants. *Henry Ford Hosp Med J* 28:15, 1980
19. Hankin J, Oktay JS: Mental disorder and primary medical care: An analytic review of the literature. In *National Institute of Mental Health (Rockville, Md): Series D, No. 7, DHEW publication No. (ADM)78-661*. Government Printing Office, 1979
20. Weisman AD: Coping with illness. In Hackett TP, Cassem NH (eds): *Massachusetts General Hospital Handbook of General Psychiatry*. St. Louis, CV Mosby, 1978, pp 264-275
21. Vaillant GE: Natural history of male psychological health: Part 5. The relationship of choice of ego mechanisms of defense to adult adjustment. *Arch Gen Psychiatry* 33:535, 1976
22. Malmquist CP: Depression in childhood and adolescence, part 1. *N Engl J Med* 284:887, 1971
23. Malmquist CP: Depression in childhood and adolescence, part 2. *N Engl J Med* 284(pt 2):955-961, 1971
24. Verwoerd A: *Clinical Geropsychiatry*. Baltimore, Williams & Wilkins, 1976
25. De Alarcon R: Hypochondriasis and depression in the aged. *Geriatr Clin* 6:266, 1964
26. Engel GL: "Psychogenic" pain and the pain prone patient. *Am J Med* 26:899, 1959
27. Mechanic D: Social psychological factors affecting the presentation of bodily complaints. *N Engl J Med* 286:1132, 1972
28. Mechanic D: Development of psychological distress among young adults. *Arch Gen Psychiatry* 36:1233, 1979
29. Minuchin S, Rosman BL, Baker L: *Psychosomatic Families: Anorexia Nervosa in Context*. Cambridge, Mass, Harvard University Press, 1978
30. Fabrega H: *Disease and Social Behavior*. Cambridge, Mass, MIT Press, 1974, pp 119-191
31. Kleinman A, Eisenberg L, Good B: Culture, illness, and care: Clinical lessons from anthropologic and cross-cultural research. *Ann Intern Med* 88:251, 1978
32. Kleinman AM: Explanatory models in health care relationships. In *Health of the Family*. Proceedings of the International Health Conference of the National Council for International Health, October 16-18, 1974. Washington, DC, National Council for International Health, 1975, pp 159-172
33. Marsella AJ: Depressive affect and disorder across cultures. In Triandis H, Draguns J (eds): *Handbook of Cross-Cultural Psychology*, vol 5: Psychopathology. Boston, Allyn & Bacon, 1980
34. Racy J: Psychiatry in the Arab east. *Acta Psychiatr Scand (Suppl)* 21:1, 1970
35. Pfeiffer W: The symptomatology of depression viewed transculturally. *Transcultural Psychiatry Res Rev* 5:121, 1968
36. Kleinman A: *Patients and Healers in the Context of Culture: An Exploration of the Borderland Between Anthropology, Medicine and Psychiatry*. Berkeley, Calif, University of California Press, 1980
37. Leighton A, Lambo T, Hughes C, et al: *Psychiatric Disorder Among the Yoruba*. Ithaca, NY, Cornell University Press, 1963
38. Tseng W, Hsu J: Chinese culture, personality formation and mental illness. *Int J Soc Psychiatry* 16:5, 1969
39. Harwood A: *Ethnicity and Medical Care*. Cambridge, Mass, Harvard University Press, 1981
40. Zborowski M: Cultural components in responses to pain. *J Soc Issues* 8(4):16, 1952
41. Miller J: Preliminary report on disability insurance. Public hearings before the Subcommittee on Social Security of the Committee on Ways and Means, House of Representatives, 94th Congress, 2nd Session, May, June 1976. Government Printing Office, 1976
42. Engel GL: The need for a new medical model: A challenge for biomedicine. *Science* 196:129, 1977
43. Engel GL: The clinical application of the biopsychosocial model. *Am J Psychiatry* 137:535, 1980
44. Kreitman N, Swirzburg P, Pearce K, Costain WR: Hypochondriasis and depression in outpatients at a general hospital. *Br J Psychiatry* 111:602, 1965
45. Aply J, Mackeith R, Meadow R: *The Child and His Symptoms: A Comprehensive Approach*. Oxford, Blackwell, 1978
46. Smilkstein G: The family APGAR: A proposal for a family function test and its use by physicians. *J Fam Pract* 6:1231, 1978
47. Holmes TH, Rahe RH: The social readjustment rating scale. *J Psychosom Res* 11:213, 1967
48. Masuda M, Holmes TH: Life events: Perceptions and frequencies. *Psychosom Med* 40:263, 1978
49. Gunderson EK, Rahe RH (eds): *Life Stresses and Illness*. Springfield, Ill, Charles C Thomas, 1974
50. Katon W, Kleinman A: Doctor-patient negotiation and other social science strategies in patient care. In Eisenberg L, Kleinman A (eds): *The Relevance of Social Science for Medicine*. Dordrecht, Holland, D Reidel, 1981, pp 253-279
51. Goldberg ID, Krantz G, Locke B: Effect of short term outpatient psychiatric therapy benefit on the utilization of medical services in prepaid group practice medical program. *Med Care* 8:419, 1970
52. Follet W, Cumming WA: Psychiatric service and medical utilization in a prepaid health setting. *Med Care* 5:25, 1967