

CHAPTER 4 PSYCHOSOCIAL INFLUENCES ON HEALTH

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The earliest texts known to medical historians postulate psychosocial influences on health. In the three mainstreams of ancient medical practice, Chinese, South Asian, and Mediterranean, references are made to the negative influences on health of envy, fear, anger, grief, and other emotions (Caudill, 1976; Gould, 1972; Leslie, 1976). It was not until the 20th century, however, that scientific scrutiny was applied to the effects of emotions on health outcome.

Dunbar (1954), who coined the label "psychosomatic," identified a number of disease states she related to life's stressors. Empirical studies of other investigators in the field of psychosomatics confirmed Dunbar's findings. Associations were established between anxiety-like emotional states and such diseases as colitis (Wolf and Wolff, 1947) cardiovascular disease (Wolff, 1950), asthma (Ziegler and Elliott, 1926), and dermatitis (Bernstein, 1938). However, in the absence of knowledge of the physiological mechanisms by which emotional responses could be translated into physical pathology, acceptance of psychosomatic theory remained limited.

Although Cannon (1928) and Selye (1946; Selye and Fortier, 1950) published seminal research on the relationship of emotions to the neuroendocrine system, it was not until the second half of the 20th century that the sciences of psychoneuroimmunology and psychoneuroendocrinology truly flourished. Ader et al. (1991) collated studies that support the hypothesis that life's stressors generate emotional responses that trigger hypothalamic and pituitary mediators that initiate endocrinological and immunological mechanisms that alter physiologic homeostasis.

Many animal and human studies now indicate that stressor-induced anxiety has significant impact on an individual's endocrine and immune systems (Ader, 1992; Ader et al., 1991; Azad et al., 1991; Borysenko and Borysenko, 1982; Calabrese et al., 1987; Coe, 1993; Cunnick et al., 1992; Dorian and Garfinkel, 1987; Hall, 1989; Locke, 1982; O'Donnell et al., 1987; Schliefer et al., 1983). Individuals so affected will be more likely to experience adverse health outcomes with such problems

as heart disease (Brodsky et al., 1987; Gorbin et al., 1993; Madalie and Goldbort, 1976; Ruberman, 1992; Siltanen, 1987), infectious disease (Dorian and Garfinkel, 1987; Loria and Padgett, 1992; Schmidt and Schmidt, 1991; Sternberg et al., 1992), cancer (Baltrusch et al., 1992; Riley, 1981; Zonderman et al., 1989), and asthma (Lehrer et al., 1993; Sibbald et al., 1988).

The clinical application of knowledge of psychosocial influences on health is captured in the biopsychosocial model (Engel, 1977, 1980). This model is structured on historical and scientific evidence that suggests that every health problem should be assessed on the basis of both biomedical and psychosocial risks (Girard et al., 1985; Levi, 1979). Pragmatic constraints, however, limit a physician to the data that will most appropriately address a patient's health problem. Thus, although a physician must be alert to the cues and clues that suggest both biomedical and psychosocial risk factors, success in the use of the biopsychosocial model requires weighing of the evidence obtained in a clinical encounter. The physician who is sensitive to biomedical and psychosocial risks as factors in health outcome will choose a balanced assessment and therapy approach that will best meet the needs of the patient and physician.

According to Engel (1980), a physician's understanding of the stabilizing and destabilizing events and relationships in the life of a patient is central to the successful application of the biopsychosocial model in health care. In this chapter, stabilizing and destabilizing forces are equated with social support resources and emotional stressors, respectively (Smilkstein, 1983). This chapter acknowledges the relationship, but the focus will be on giving the reader an understanding of psychosocial risk—how it is assessed, and how it is managed in a primary care setting.

A CYCLE OF PSYCHOSOCIAL RISK: AN ASSESSMENT MODEL

A model is needed that forms into a cohesive unit the components that contribute to psychoso-

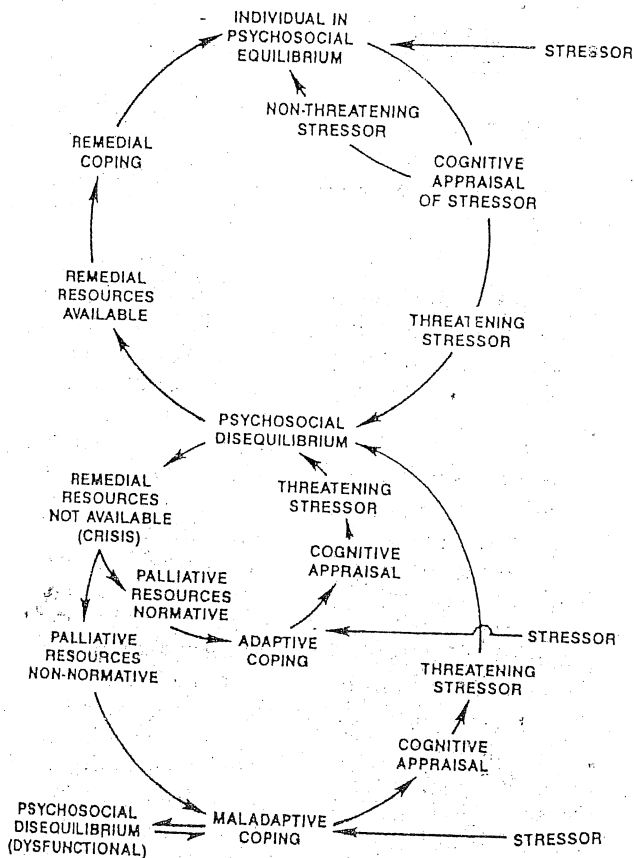


FIGURE 4-1. Cycle of psychosocial risk.

cial risk. A cyclic model of psychosocial risk will be presented that displays emotional responses reported to occur when an individual perceives a life experience as a stressor (Fig. 4-1). The purpose of the model is to facilitate an understanding of the forces that influence the relationship between psychosocial risk and health.

The fundamental structure of this model is drawn from the Cycle of Family Function, which offers a conceptual framework for viewing the responses of a family when it experiences a stressful life event (Smilkstein, 1980). Although the Cycle of Family Function was built on the contributions of many social scientists, Hill's (1965) studies of families under stress were seminal for this paper. Hill's ABCX formula offered the following conceptual framework: "A (the event); interacting with B (the family's crisis-meeting resources); interacting with C (the definition the family makes of the event); produces X (the crisis)." In this paper, Hill's formula is interpreted as a stressor-resources interaction (modified by idiosyncratic coping mechanisms), producing a qualitatively predictable alteration in an individual's emotional homeostasis.

This model focuses on an individual's response to life stressors and demonstrates how an individual's psychosocial equilibrium may be influenced by an interaction of stressors, social support, and

coping strategies. A definition of terms used in the cycle is given in Table 4-1.

The Upper Cycle: Stressor Resolution

Multiple stressors impact on an individual's psyche each day (Dohrenwend and Dohrenwend, 1984; Hinkle, 1973). These stressors are received and processed, and a response is generated that reflects the individual's cognitive appraisal of the stressor (Lazarus and Folkman, 1984). Cognitive appraisal is influenced by many factors. Among these factors are the individual's psychosocial equilibrium at the time the stressor is received, the individual's past experience with similar stressors, the number and intensity of other stressors being processed by the individual, and the perceived threat to relationships and self-esteem (Lazarus et al., 1974).

Not all stressors stimulate an alarm reaction. Cognitive appraisal may result in a view of the stressor as nonthreatening. This response usually occurs when past experience with the stressor has been favorable, and when resources are deemed to be available. Nonstressful experiences will not alter psychosocial equilibrium significantly (Holmes and Rahe, 1967; Masuda and Holmes, 1978).

However, if the stressors are perceived as threatening (based on past experience or knowledge that needed resources may not be available), the individual moves into a state of psychosocial disequilibrium (Cassel, 1974; Pearlin et al., 1981). Because of the "dis-ease" associated with psychosocial disequilibrium, resources are sought to neutralize or buffer the stressor (Cobb, 1976). A number of psychosocial resource categories have been identified—social, cultural, religious, educational, economic, environmental, and medical (Smilkstein, 1983). Of these, social support from family members, friends, and work supervisors appears to be the most influential in altering psychosocial risk (Cassel, 1976; Cohen et al., 1986). If resources are available and remedial coping strategies are employed, the individual usually will experience stressor resolution and a return to psychosocial equilibrium.

The Lower Cycle: Unresolved Stressors

The downward spiral in the cycle occurs when individuals experience threatening psychosocial stressors and find their resources or coping mechanisms inadequate for stressor resolution (Shonkoff, 1985; Thoits, 1986). An inability to identify or utilize the resources needed to solve a problem results in a crisis state (Baldwin, 1978). Crisis is usually associated with anxiety (Spielberger, 1972). This concept of anxiety as an outcome of crisis or

TABLE 4-1. DEFINITION OF TERMS FROM THE CYCLE OF PSYCHOSOCIAL RISK

Stressors	A stressor is a life experience that may disrupt or endanger an individual's personal and social values and relationships. (This definition is in accordance with Selye's language of stress, in which the noxious stimulating condition or stressor has the potential for producing emotional disequilibrium or stress.) Stressors are divided into two categories: (1) life change events and (2) role strains or chronic life situations.
Psychosocial equilibrium	A state of psychologic homeostasis in which resources are available to meet the routine challenges of life's stressors.
Cognitive appraisal	The process by which an individual evaluates a life event or role strain in terms of the impact of the experience on his or her emotional and social integrity.
Threatening stressor	A life event or role strain that represents a danger or challenge to a relationship or self-esteem.
Psychosocial disequilibrium	A state of impaired emotional and social functioning that occurs when an individual's resources are inadequate or unavailable to meet an intense stressor or an accumulation of stressors.
Resources, social support	Those assets that serve to nurture an individual and that supply the means for solving stressor-induced problems. Resources fall into the general categories of social, cultural, religious, economic, educational, environmental, and medical support systems.
Remedial coping	The process by which an individual uses resources and adaptive strategies to maintain some degree of psychosocial function when resources are inadequate or not available to solve a stressor-induced problem.
Crisis	A state of emotional disequilibrium, usually becoming manifest by anxiety that results from the failure of an individual to identify or use resources to resolve a stressor-induced problem.
Maladaptive coping	The use of pathologic defense mechanisms to escape from an unresolved crisis, resulting in a state of impaired emotional and social functioning. In a medical setting, the most commonly seen pathologic defenses are projection and somatization.
Chronic psychosocial disequilibrium	A state of emotional and social dysfunction, usually becoming manifest by an individual's inability to cope with life's responsibilities, such as work, home, or school. The dysfunctional state is characterized by responses such as depression, panic attacks, and disabling somatization.

emotional disequilibrium is of central importance, because studies have shown that anxiety is the primary emotional mediator of neuroendocrinologic and neuroimmunologic system changes that alter health outcome (Ader and Cohen, 1975; Borysenko and Borysenko, 1982; Stein et al., 1976).

In the absence of problem-solving resources, individuals choose some form of palliative coping to obtain relief from anxiety and to maintain ongoing function. Some individuals temporize and gain release from the emotional tensions induced by an unresolved stressor through activities such as taking time out, physical exercise, and relaxation through behavior modification (Kobosa et al., 1982; Martin and Coates, 1987). These palliative coping techniques permit transient equilibrium and modified function in the face of an unresolved stressor. A host of psychological defense mechanisms may be used on a short-term basis to bide time while seeking resources to manage the stressor. Avoidance, denial, projection, and somatization are examples of psychological defense mechanisms that may be employed to gain relief from the pressure of an unresolved, anxiety-producing stressor.

Not all stressors are resolvable. For example, after the death of a spouse, there is a period of bereavement with its concomitant psychological disequilibrium and dysfunction, yet individuals find it necessary to get on with life. In general, those who return to psychological equilibrium the soonest are those who have social support and use "mature" coping strategies (Walker et al., 1977). Some of the "mature" strategies used for both remedial and palliative coping are altruism, anticipa-

tion, humor, resource sharing, role adjustment, sublimation, and time out (Smilkstein, 1985).

Knowledge of a patient's social support, coping strategies, and stressors will enhance the physician's ability to understand an individual's psychosocial risk, but the idiosyncratic effect of personal resources also must be considered when assessing the quality of a patient's ability to manage stressors. Kobosa and colleagues (1982) applied the term "hardiness" to the subjects in their studies who demonstrated a low incidence of illness in the face of high stress. The developmental history of hardiness has not been elaborated; however, individuals so labeled have been characterized as having (1) a greater sense of control over what occurs in their lives, (2) a feeling of commitment to the various activities in which they are engaged, (3) a view of change as a challenge rather than a threat, and (4) a sense of a meaningfulness to their lives. It is likely that hardiness reflects past successes in employing resources to overcome life stressors. A postulate that needs examination is that hardiness will erode if an individual experiences a series of coping failures as a result of unresolvable stressors and the loss of social support.

The Lower Cycle: Long-Term Maladaptive Psychosocial Equilibrium

When stressors present an overwhelming threat or become chronic, individuals seek long-term defense strategies to modify anxiety. That is, individuals use strategies that permit them to retain self-

esteem and maintain relationships, even though their function in assigned roles may be impaired (Bowden, 1983).

The strategies chosen to address anxiety-provoking stressors may be consciously planned, initiated with only partial awareness, or generated from an unconscious level. Although many psychological defense mechanisms may be seen in a health care setting, the ones with somatic manifestations attract the most interest. Two of the more frequently encountered are projection and somatization (Ford, 1983).

Projection is most commonly seen in families. A child with a health problem may become the identified patient onto whom the unresolved family problems are transferred. The greater the number and intensity of the family stressors, the more likely the child is to appear in the clinic and hospital (Beautrais et al., 1982). In contrast, families rated as functionally intact have significantly fewer visits to health care professionals (Pratt, 1976; Smilkstein, 1984).

Somatization occurs when an individual consciously or unconsciously employs physical symptoms to address the anxiety of an unresolved stressor. The physical symptoms usually are associated with an existing health problem, but they also may be related to a past personal or family experience with illness or physical disability (Mechanic, 1972; Rosen et al., 1982). Somatization in one of its many forms (such as chronic low back pain) is among the most common problems seen by physicians (Nachemson, 1984). Somatization is an expedient defense mechanism because it places individuals in the sick role, and individuals who are granted the sick role usually are released from responsibilities associated with work, school, and home. Furthermore, they also are permitted to be cared for by others (Parsons, 1958).

DYNAMIC MODEL

The Cycle of Psychosocial Risk represents pathways that may be followed as an individual strives for emotional homeostasis. The dynamic nature of the cycle reflects the ever-changing pressures of unresolved stressors and the impact of new stressors, and changes in the quality, quantity, and availability of resources.

If and when new resources for coping are discovered, the individual can be expected to cycle upward to a higher level of functional equilibrium. Other times, when the number and intensity of stressors increase, a resource-poor person may move from long-term maladaptive coping into the dysfunctional state of chronic disequilibrium. Those who move into this category usually are unable to carry on tasks of daily living. Major therapeutic intervention usually is required to bring individuals out of chronic disequilibrium and into the

emotional homeostasis that is required for positive functioning both as an individual and with family, friends, and community.

CLINICAL APPLICATIONS

The physician who is receptive to psychosocial cues and willing to intervene should establish dual therapeutic goals. The first should be to offer short-term symptomatic relief from the disabling anxiety that usually is associated with psychosocial disequilibrium. Such relief from anxiety may be obtained with the use of palliative coping techniques. These include supportive interventions such as the ancient art of listening to the patient as well as instructing the patient in health-promoting activities (exercise, regular sleep, and balanced diet) (Fordyce, 1976). Because the impact of stressors on the patient may be buffered by social support, the patient should be counseled to seek aid from family and friends, but assessment of the quality of the patient's social support also is needed. Although family and friends usually are recognized as the first line of social support, the quality of these resources must be investigated, because family and friends also may be the source of stress for the patient. In addition, psychotropic medication should be prescribed when needed to augment the above program.

A companion therapeutic goal should be long-term problem resolution or remedial coping. This activity requires the identification and assessment of stressors such as life change events and role strains (chronic life situations) (Pearlin and Johnson, 1977).

To help the patient achieve an adequate level of remedial coping ability, the physician's challenge is to determine the resources that will help the patient manage stressors. Figure 4-2 is a biopsychosocial computational model that can be used to make an empirical determination of health outcome. The psychosocial risk portion of the equation demonstrates an interactive relationship between stressors and resources (Sarason et al., 1985). For example, psychosocial risk is heightened when there is an increase in stressors (numerator) and a decrease in resources (denominator). This simple arithmetic model can be applied in routine practice situations. Support for application

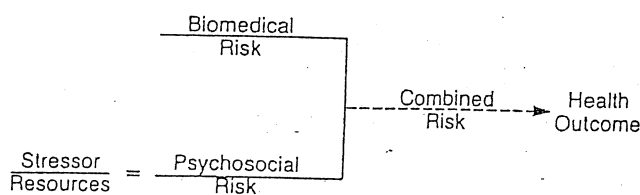


FIGURE 4-2. A biopsychosocial model for predicting health outcome.

TABLE 4-2. EXAMPLES OF OVERT CUES OF PSYCHOSOCIAL DISEQUILIBRIUM OR MALADAPTATION

Depression	Family member abuse
Panic attacks	(child, spouse, elder)
History of alcohol or substance abuse	Delinquency
Sexual dysfunction	Running away
Divorce/separation	School behavior problem
Incest	School failure

of this model can be found in health outcome studies that have examined such health problems as complications of pregnancy (Pagel et al., 1990; Reeb et al., 1987; Smilkstein et al., 1984) and cardiovascular disease (Haynes et al., 1980; Medalie and Goldbourt, 1976).

How does a physician identify the patient whose health problem indicates that assessment of psychosocial risk is appropriate? Because, in this cyclic model, psychosocial risk relates primarily to emotional disequilibrium caused by a rise in stressor intensity or a loss of social support, or both, a physician must be attitudinally prepared to recognize emotional disequilibrium. To do this, the physician must be able to receive cues from patients that reflect psychosocial risk. Tables 4-2 and 4-3 list examples of overt and covert cues that suggest significant disturbances in the patient's psychosocial equilibrium.

Application of the Biopsychosocial Model

When the patient presents with both biomedical and psychosocial risks, rational responses are necessary. The medical, economic, and temporal resources of the patient, physician, and health system must be used appropriately and frugally if the biopsychosocial approach to health care is to be accepted. Present medical training and practice highlight biomedical factors so strongly that iatrogenic reinforcement of a patient's somatization frequently occurs. This problem, which has been labeled as "somatic fixation" (Van Eijk et al., 1983),

TABLE 4-3. EXAMPLES OF COVERT CUES OF PSYCHOSOCIAL DISEQUILIBRIUM OR MALADAPTATION

Somatization
Excessive utilization of health care facilities
Noncompliance with use of medications or instructions for self-care
History of multiple surgeries
Chronic pain
Failure to thrive
Recurrent childhood poisonings
Shopping for different physicians

is the process by which a patient becomes locked into a physical problem with the support of a physician who pursues a patient's persistent or exaggerated physical symptoms through an escalation of laboratory tests, office visits, and consultations. It is true that good medical practice requires a relevant pursuit of persistent or exaggerated physical symptoms with follow-up visits, objective studies, and second opinions. A study of physicians involved in "somatic fixation," however, suggests that their patients would have experienced emotional and economic benefits if psychosocial risks had been examined along with biomedical risk.

Case Discussion

Figure 4-3 illustrates psychosocial risk assessment applied to a case study using the Cycle of Psychosocial Risk. The psychosocial risk assessment was carried out in harmony with biomedical studies. The dynamically interrelated components revealed by this assessment can be observed by following the Cycle of Psychosocial Risk pathways.

The patient initially reported anxiety due to chest pain. He admitted to a fear that chest pain was associated with heart problems and death. The physician also learned that within the last year the patient had experienced a series of stressful life events that challenged his emotional homeostasis—a major move, a painful divorce, and a new job. The job was a daily hassle because of conflicts with the boss and the patient's concern regarding the adequacy of his job performance.

Life change events, such as those experienced by the patient in this case study, have been studied extensively over the past 30 years. This research has established that life change events are significantly associated with adverse health outcomes such as cardiovascular disease (Ostfeld et al., 1985). Such findings emphasize the value of a biopsychosocial approach, especially when anxiety is expressed along with the presenting complaint.

Although all life events have an impact on a patient's psychosocial equilibrium, negative life experiences seem to cause the most intense responses (Sarason et al., 1978). These include loss of relationships (especially of family members and friends), loss of self-esteem, loss of or decrease in body function, major economic reversals, and change of home site (Masuda and Holmes, 1978). Identification of high-impact stressors is important, but the physician also should seek to identify other life change events that may be troubling the patient, because in some patients it will be a "pile-up" of life change events that causes emotional disequilibrium (Patterson, 1988).

The second category of stressors that contributes to psychosocial risk includes role strains or chronic life situations associated with an individual's position as a parent, friend, patient, employee, student, or member of a family or group (Pearlin and John-

CASE HISTORY: A 35-year-old, white, divorced, male computer scientist, who recently moved to a new city, reported to his physician the recent onset of chest pain and anxiety. Psychosocial assessment is shown below following the pathways of the Cycle of Psychosocial Risk. Biomedical assessment, which was also completed by his physician, did not reveal any organic pathology.

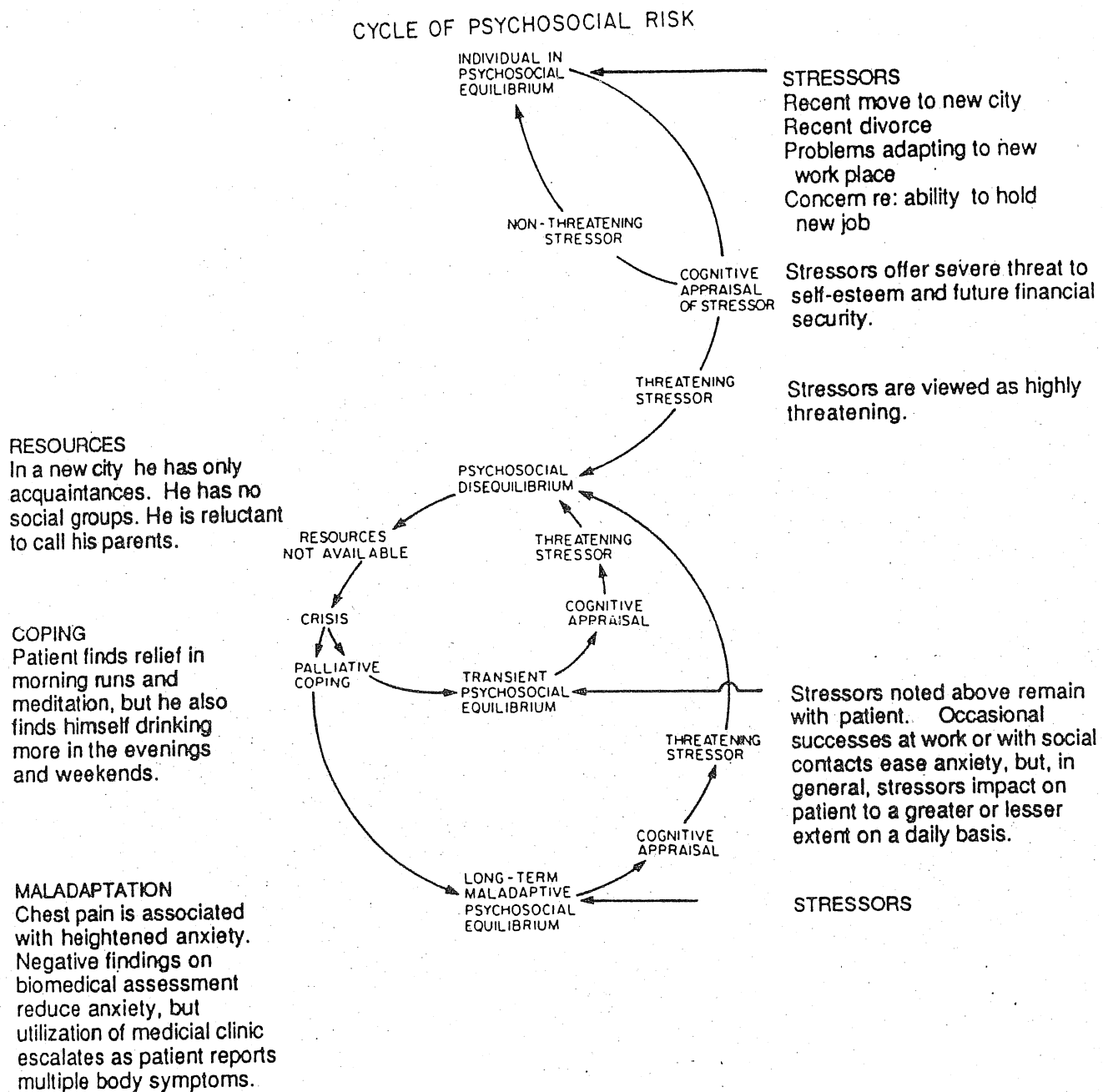


FIGURE 4-3. Psychosocial stressors and resources are given empiric values so that psychosocial risk may be calculated. The interactive effect of biomedical and psychosocial risk yields a combined risk. Knowledge of a combined risk enhances the physician's ability to predict health outcome.

son, 1977). Conflicts in role relationships, such as with one's boss, may challenge an individual's psychosocial equilibrium severely and have a negative impact on health (Hamburg and Killilea, 1979).

The physician who is able to identify role strains and stressful life events that contribute to a patient's maladaptive behavior is in a position to combine biomedical and psychosocial interventions to the patient's advantage. In all psychosocial risk

studies, however, it is not enough to identify stressors. The physician also must assess the significance of stressors to the patient (Eisenberg and Kleinman, 1981; Kleinman and Smilkstein, 1980). This is perhaps the most problematic aspect of psychosocial assessment because physicians often assume they understand the intensity of a patient's stressors based on their own experiences. Such an attitude fails to recognize that differences in cultural and social backgrounds of physicians and patients result in physicians and patients making different cognitive appraisals of stressors. In order for the physician's response to be effective, the physician need not agree with the patient regarding the significance of the stressor; however, when the physician accurately understands the patient's idiosyncratic cognitive appraisal of the stressor, therapeutic intervention will be facilitated.

Figure 4-3 traces the patient's movement into the lower cycle of unresolved stressors. He traveled this route primarily because his resources were inadequate and his coping strategies did not permit use of available social support, such as his parents. Although palliative coping techniques (exercise and meditation) gave some relief, the strain of the unresolved stressors remained.

The appearance of the chest pain significantly altered the patient's homeostasis. As a somatic representation of the patient's heightened anxiety, the chest pain denied the patient the option of exercise for palliative coping. However, the perceived physical problem did lead the patient to the physician.

The physician thoroughly investigated the biomedical aspects of the case, but when the physical and laboratory findings were reported to the patient as normal, the reassurance did not relieve the patient's anxiety. Psychotropic drugs were prescribed to relieve this anxiety; however, the physician's records showed an increase in office visits, with the patient reporting early morning wakening and loss of appetite.

Management of individuals at high psychosocial risk is challenging. Physicians frequently find that the care of these patients is characterized, as in this case, by high utilization and poor compliance (Becker and Maiman, 1975). As stress takes its toll, depression becomes more evident and often requires intense biopsychosocial intervention by the physician to maintain function and, at times, to prevent suicide.

When it became evident from the psychosocial risk assessment that this patient's anxiety and depression were a major problem, interventions based on the cyclic model were designed. These included interventions that specifically addressed components of the cyclic model, such as regular scheduled office visits to the physician, listening time by the physician to identify work and home problems, reassurance regarding the patient's heart status, and counseling to encourage use of support from family and friends.

After the biopsychosocial therapeutic interventions were initiated by the physician, changes were observed in the patient that suggested improvement. He identi-

fied a few individuals in the community with whom he shared common interests. He realistically examined his stressors to determine whether they were resolvable, and he voluntarily discontinued his psychotropic drugs and decreased the number of his office visits.

In general, as clarified by the cyclic model, movement toward psychosocial equilibrium can be measured by a patient's ability to recognize the stressors that are jeopardizing emotional stability, to identify resources and employ them appropriately, to move away from drug and physician assistance, and to employ coping strategies that advance physical and emotional health.

PRINCIPLES OF PSYCHOSOCIAL INTERVENTION

The physician who wishes to identify the psychosocial risks that may influence health care or health outcome must assess the patient's stressors and resources (Hinkle, 1987). The process is initiated when a cue suggests overt or covert evidence for psychosocial dysfunction. A willingness to listen to the patient usually will facilitate the identification of major stressors. Once the stressor or stressors have been identified, the physician should ask the patient to estimate the importance of the stressor(s) in his or her life.

The second part of the psychosocial risk equation requires the assessment of resources. It is not enough to establish that the patient has family and friends. The resource person(s) must be available and valued by the patient.

For those patients who are identified as having anxiety resulting from high psychosocial risk, short-term intervention requires consideration of appropriate medications and techniques for palliative coping (e.g., time out, aerobic exercises, and behavior modification). In the office or clinic, behavior modification has special merit. If continuity of care can be effected, wellness activities can be substituted for dysfunctional behavior such as high utilization and somatization.

An outline of behavior modification includes the following agenda: physical activity is chosen that is acceptable to the patient (e.g., walking); time or distance goals, or both, are set; reinforcement of the activity is carried out by family, friends, and physician; and the activity is rehearsed, monitored, and shaped to advance the patient's performance and improve the patient's self-esteem. Central to the success of behavior modification is the identification of appropriate goals and the encouragement given by the patient's social support system (Martin and Coates, 1987).

The quality of social support may be the single most important assessment in the evaluation of psychosocial risk in an individual who is experiencing life's stressors. Much has been written about the significant role social support plays in

relation to an individual's health (Dean and Lin, 1977; Sarason et al., 1985). For example, Ruberman et al. (1984) reported that patients who are socially isolated and having a high degree of life stressors had four times the risk of death as those with good social support. Impaired social support also has been related to cardiovascular disease morbidity (Bland et al., 1991; Helgeson, 1991; Medalie and Goldbourt, 1976; Orth-Gomer et al., 1993).

Social support may be ascertained in a clinical encounter by asking the patient, "When you have a personal problem, to whom do you turn for help?" The question regarding social support usually will follow a patient's report of a life stressor. In this situation, another question that might follow is, "With whom can you discuss your problem?" The patient's response usually will indicate to the clinician the availability and quality of social support.

Whenever possible, remedial coping should be the long-range goal of the physician-patient part-

nership. This long-term intervention requires identification of resources that may be directed toward the management of anxiety-producing stressors (e.g., social support person(s), use of counseling, educational programs, social agencies, and psychotherapy).

Physicians should recognize that they are major resources in the treatment of patients at psychosocial risk. Even with optimal physician assistance, high-risk patients with poor social support, whose lives are characterized by an accumulation of high-intensity stressors, frequently experience an accentuation of physical and emotional health problems. The most effective treatment for such patients may be long-term, supportive therapy. This therapy involves three strategies: (1) offering regular appointments at which time positive feedback is given to bolster self-esteem (usually focusing on behavior modification); (2) addressing stressors as contributors to illness problems; and (3) searching for new resources at each patient encounter.

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