Chapter 2
The Psychosomatic View

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2.1 Introduction

The ongoing progress in scientific medicine and technology in recent years has led to further splitting of knowledge and consequent fragmentation in the response to health issues. On the other hand, this is in contrast with research evidence that points to the importance of incorporating psychosocial aspects and holistic view in the approach to the person presenting with any health problem. While nothing is changing in clinical practice modalities of dealing with different phases of disease management, there is a clear need to improve patient-physician relationships, patient satisfaction and compliance, and final outcomes.

The interdisciplinary field of psychosomatic medicine has the potential to fill this gap providing both the cognitive frame of reference and the practical tools that can be employed in everyday clinical practice.

2.2 History and Current Developments

The term "psychosomatic" entails different meanings and connotations, which may explain its varying degrees of popularity. Heinroth introduced the concept in 1818, but modern psychosomatic medicine developed in the first half of the past century.

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A. Morandi and A.N. Narayanan Nambi (eds.), *An Integrated View of Health and Well-being*, Cross-Cultural Advancements in Positive Psychology 5, DOI 10.1007/978-94-007-6689-1_2,
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It resulted from the interaction of different concepts having an ancient tradition in Western medicine: psychogenesis of disease and holism (Lipowski 1986). The idea of psychogenesis characterized the first phase of development of psychosomatic medicine (1930–1960) and evolved toward the definition of "psychosomatic disease" for a number of conditions in which psychological aspects seemed to have a preponderant role. Despite early criticism, the psychogenic postulate continued to exert explanatory power in the search for pathogenetic mechanisms. For example, a physical illness such as peptic ulcer was believed to be caused by psychological factors.

The term "psychosomatic disorder" was strongly criticized by several psychosomatic researchers, including Kissen (1963), Engel (1967), and Lipowski (1986). Kissen (1963) provided a better specification of the term "psychosomatic." He clarified that the relative weight of psychosocial factors may vary from one individual to another within the same illness and underscored the basic conceptual flaw of considering diseases as homogeneous entities. Engel (1967) wrote that the term "psychosomatic disorder" was misleading, since it implied a special class of disorders of psychogenic aetiology and, by inference, the absence of a psychosomatic interface in other diseases. On the other hand, he viewed reductionism that overlooked the impact of non-biological circumstances upon biological processes as a major cause of mistreatment. Lipowski (1986) criticized the concept of psychosomatic disorder since it tended to perpetuate the obsolete notion of psychogenesis, which is incompatible with the doctrine of multi-causality, a core postulate of current psychosomatic medicine. With his work, he gave an invaluable contribution in setting the scope, mission, and methods of psychosomatic medicine.

Among major innovations stands the introduction of the biopsychosocial model of illness by Engel (1977). It allows illness to be viewed as a result of interacting mechanisms at the cellular, tissue, organismic, interpersonal, and environmental levels. Accordingly, the study of every disease must include the individual, his body, and his surrounding environment as essential components of the total system (Novack et al. 2007). This model retains today its full impact in clinical research and practice (Fava and Sonino 2008).

An updated definition of psychosomatic medicine and its boundaries with related disciplines (Fava and Sonino 2010) are illustrated in Box 2.1.

Box 2.1 Psychosomatic Medicine

Definition

Psychosomatic medicine may be defined as a comprehensive, interdisciplinary framework for:

(a) Assessment of psychosocial factors affecting individual vulnerability, course, and outcome of any type of disease
(b) Holistic consideration of patient care in clinical practice
(c) Integration of psychological therapies in the prevention, treatment, and rehabilitation of medical disease

(continued)

Box 2.1 (continued)

Boundaries

In the USA, psychosomatic medicine has recently become a subspecialty recognized by the American Board of Medical Specialties. This may lead to identifying psychosomatic medicine with consultation-liaison psychiatry (Gitlin et al. 2004). Consultation-liaison psychiatry is clearly within the field of psychiatry; its setting is the medical or surgical clinic or ward, and its focus is the comorbid states of patients with medical disorders (Wise 2000). Psychosomatic medicine is, by definition, multidisciplinary. It is not confined to psychiatry but may concern any field of medicine. Not surprisingly, in countries such as Germany and Japan, psychosomatic activities have achieved an independent status (Deter 2004).

Subdisciplines

The general psychosomatic approach has resulted in a number of subdisciplines within their own areas of application: psychooncology, psychonephrology, psychoneuroendocrinology, psychoimmunology, psychodermatology, and others. Such subdisciplines have developed clinical services, scientific societies, and medical journals.

2.3 Psychosocial Factors and Individual Vulnerability

It has become increasingly clear that we can improve medical care by paying more attention to psychological aspects of medical assessment (Kroenke 2002; Fava et al. 2012), with particular reference to the role of stress (McEwen 2007; Fava et al. 2010). A number of factors have been implied to modulate individual vulnerability to disease.

2.3.1 Stressful Life Events

The role of early developmental factors in susceptibility to disease has been a frequent object of psychosomatic investigation (McEwen 2007; Romans and Cohen 2008). Using animal models, events such as premature separation from the mother have consistently resulted in pathophysiological modifications, such as increased hypothalamic-pituitary-adrenal axis (HPA) activation (McEwen 2007). They may render the human individual more vulnerable to the effects of stress later in life. There has been also considerable interest in the association of childhood physical and sexual abuse with medical disorders later in life. This link has been postulated

for chronic pain and irritable bowel syndrome and several adverse health outcomes (functional disability and risk behaviors), yet the evidence currently available does not allow any firm conclusion (Romans and Cohen 2008).

The notion that events and situations in a person's life, which are meaningful to him or her, may be followed by ill health has been a common clinical observation. The introduction of structured methods of data collection and control groups has allowed to substantiate the link between life events in the year preceding the onset of symptoms and a number of medical disorders, encompassing endocrine, cardiovascular, respiratory, gastrointestinal, autoimmune, skin, and neoplastic disease (Novack et al. 2007; Theorell 2012).

2.3.2 Chronic Stress and Allostatic Load

Subtle and long-standing life situations should not too readily be dismissed as minor and negligible, since chronic, daily life stresses may be experienced by the individual as taxing or exceeding his or her coping skills. McEwen (2007) proposed a formulation of the relationship between stress and the processes leading to disease based on the concept of allostasis, the ability of the organism to achieve stability through change. Allostatic load reflects the cumulative effects of stressful experiences in daily life. When the cost of chronic exposure to fluctuating and heightened neural or neuroendocrine responses exceeds the coping resources of an individual, allostatic overload ensues (Fava et al. 2010). Allostatic overload can be assessed on clinical grounds. Biological parameters of allostatic load, such as glycosylated proteins, coagulation/fibrinolysis, and hormonal markers, have been linked to cognitive and physical functioning and mortality (McEwen 2007).

2.3.3 Health Attitudes

Unhealthy lifestyle is a recognized risk factor for most prevalent diseases, such as diabetes, obesity, and cardiovascular illness (Tomba 2012). In 1985, Geoffrey Rose showed that the risk factors for health are almost always normally distributed and supported a general population approach to prevention, instead of targeting those at the highest risk. Accordingly, switching the general population to healthy lifestyles would be a major source of prevention.

2.3.4 Personality and Psychological Well-Being

The notion that personality variables can affect vulnerability to specific diseases was prevalent in the first phase of development of psychosomatic medicine (1930–1960) and was particularly influenced by psychoanalytic investigators, who believed that specific personality profiles underlay specific "psychosomatic diseases." This hypothesis

was not supported by subsequent research (Lipowski 1986). Two personality constructs that can potentially affect general vulnerability to disease, type A behavior and alexithymia (i.e., the inability to express emotion), have attracted considerable attention, but their relationship with health is still controversial (Cosci 2012). However, personality variables (e.g., obsessive-compulsive, paranoid, impulsive) may deeply affect how a patient views illness, what it means to him/her, and his/her interactions with others, including medical staff.

Positive health is often regarded as the absence of illness, despite the fact that, half a century ago, the World Health Organization defined health as a "state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (further discussion of this issue can be found in Chaps. 1 and 9 of this volume). Research on psychological well-being has indicated that it derives from the interaction of several related dimensions (Ryff and Singer 1996; Fava and Tomba 2009). Several studies have suggested that psychological well-being plays a buffering role in coping with stress and has a favorable impact on disease course (Pressman and Cohen 2005).

2.3.5 Social Support

Prospective population studies have substantiated the role of social support in relation to mortality, psychiatric and physical morbidity, and recovery and adjustment to chronic disease (Fava and Sonino 2010). An area that is now called "social neuroscience" is beginning to address the effects of the environment and social network on the brain and the physiology it regulates (McEwen 2007).

2.3.6 Spirituality

Religiosity and spirituality (broadly defined as any feelings, thoughts, experiences, and behaviors that arise from the search for the "sacred") have been a matter of growing interest in epidemiological research (Chida et al. 2009). Religiosity appeared to have a favorable effect on survival, that is, independent from behavioral factors (smoking, drinking, etc.), negative affect, and degree of social support. This topic is also addressed in Chap. 9, as well as in the chapters included in Part II of this volume, since attention to the spiritual dimension is an integral part of the Āyurveda approach to health.

2.4 Need for Holistic Consideration in Patient Care

Psychosocial and biological factors interact in a number of ways in the course of medical disease. Their varying influence together with each individual response determines the unique quality of the experience and attitude of every patient in any given episode of illness.

2.4.1 Psychiatric Disturbances

Psychiatric illness appears to be strongly associated with medical diseases. Mental disorders increase the risk for communicable and noncommunicable diseases; many health conditions increase the risk for mental disturbances; comorbidity complicates recognition and treatment of medical disorders (Prince et al. 2007).

There is evidence that psychiatric disturbances in the course of medical disease are substantially different from those which can be found in psychiatric settings in terms of clinical characteristics, prognosis, and response to treatment.

Major depression has emerged as an extremely important source of comorbidity in medical disorders (Katon 2003). It was found to affect quality of life and social functioning and lead to increased health care utilization, to be associated with higher mortality, particularly in the elderly, to have an impact on compliance, and to increase susceptibility to medical illness.

2.4.2 Psychological Disturbances

Current emphasis in psychiatry is about assessment of symptoms resulting in syndromes identified by diagnostic criteria (DSM). However, there is emerging awareness that also psychological symptoms which do not reach the threshold of a psychiatric disorder may affect quality of life and entail pathophysiological and therapeutic implications. This has led to the development of Diagnostic Criteria for Psychosomatic Research (DCPR) (Box 2.2) and a specific interview to assess patients (see examples in Box 2.3). The DCPR were introduced in 1995 and tested in various clinical settings (Porcelli and Sonino 2007).

Box 2.2 The Diagnostic Criteria for Psychosomatic Research (DCPR)

1. Health anxiety
2. Thanatophobia
3. Disease phobia
4. Illness denial
5. Persistent somatization
6. Conversion symptoms
7. Functional somatic symptoms secondary to a psychiatric disorder
8. Anniversary reaction
9. Demoralization
10. Irritable mood
11. Type A behavior
12. Alexithymia

The advantage of this classification is that it departs from the dichotomy between organic and functional and from the misleading and dangerous assumption that if organic factors cannot be identified, there should be psychiatric reasons which may be able to fully explain the somatic symptomatology. The psychosomatic literature provides an endless series of examples where psychological factors could only account for part of the unexplained medical disorder (Fava et al. 2012). Similarly, the presence of an established medical disorder does not exclude but indeed increases the likelihood of psychological distress and abnormal illness behavior (Fava and Sonino 2010).

Box 2.3 Examples of Questions Derived from the Diagnostic Criteria for Psychosomatic Research (DCPR)

Demoralization
Do you feel you have failed to meet your expectations or those of other people?
Is there an urgent problem you feel unable to cope with?
Do you experience feelings of helplessness, hopelessness, and/or giving up?

Irritable Mood
When you feel irritable, do you need to make an increased effort to control your temper?
Do you have uncontrollable verbal or behavioral outbursts?

Illness Denial
Have you ever neglected to bring to your physician's attention serious symptoms or ignored your physician's diagnosis and recommendations?
If the physician tells you that you have a disease and prescribe you drugs, a diet, or physical activity, do you follow the medical advice?

2.4.3 Quality of Life

While there is neither a precise nor an agreed definition of quality of life, research in this area seeks essentially two kinds of information: the functional status of the individual and the patient's appraisal of health. Indeed, the subjective perception of health status (e.g., lack of well-being, demoralization, and difficulties fulfilling personal and family responsibilities) is as valid as that of the clinician in evaluating outcome (Fava and Sonino 2010). This is an aspect that deserves more attention in clinical assessments.

2.5 Integration of Psychological Interventions in Medicine

Psychological interventions in the medically ill may be performed by different health professionals and may range from reassurance and effective communication to specific psychotherapeutic and psychopharmacological treatments.

2.5.1 Treatment of Psychiatric Comorbidity

Psychiatric disorders are frequently unrecognized and untreated in medical settings, with widespread harmful consequences for the individual and the society (Prince et al. 2007). Treatment of psychiatric comorbidity such as depression, with either pharmacological or psychotherapeutic interventions, markedly improves health-related functioning and the quality of life, although an effect on medical outcome has not been demonstrated.

2.5.2 Psychosocial Interventions

The use of psychotherapeutic strategies (cognitive-behavioral therapy, stress management procedures, brief dynamic therapy) in controlled investigations has yielded a substantial improvement in a number of medical disorders (Kaupp et al. 2005). Examples are interventions that increase social support and enhance coping capacity in patients with breast cancer and malignant melanoma or employ writing about personal stressful experiences in asthma and rheumatoid arthritis (see Chap. 9 for further details on this issue).

Research on psychotherapy has disclosed common therapeutic ingredients relevant to any physician-patient relationship, listed in Box 2.4 (Fava and Sonino 2010).

Box 2.4 Nonspecific Therapeutic Ingredients

The therapist's full availability for specific times	= *Attention*
The patient's opportunity to ventilate thoughts and feelings	= *Disclosure*
An emotionally charged, confiding relationship with a helping person	= *High arousal*
A plausible explanation of the symptoms	= *Interpretation*
The active participation of patient and therapist in a ritual or procedure that is believed by both to be the means of restoring the patient's health	= *Rituals*

Abnormal illness behavior may greatly benefit from this type of intervention. For many years, abnormal illness behavior has been viewed mainly as an expression of personality predisposition and considered to be refractory to psychotherapy. There is now evidence to challenge such pessimistic stance. For instance, several controlled studies indicate that hypochondriasis is a treatable condition by the use of simple cognitive strategies (Fava and Sonino 2010).

Lifestyle Modification

A basic psychosomatic assumption is the consideration of patients as partners in managing disease. The partnership paradigm includes both collaborative care, a

patient-physician relationship in which physicians and patients make health decisions together (Joosten et al. 2008), and self-management, a plan that provides patients with problem-solving skills to enhance their self-efficacy (Bodenheimer et al. 2002). The benefits of modifying lifestyle have been particularly demonstrated in coronary heart disease (Rozanski et al. 1999) and type 2 diabetes (Sperl-Hillen et al. 2011; Sonino et al. 2007). As elucidated in Part II and in Chap. 9 of this volume, attention to lifestyle is one of the pillars of Āyurveda. Further, psychological treatments may be effective in health-damaging behaviors, such as smoking (Tomba 2012).

2.6 Current Issues

There have been major transformations in health care needs in the past decades. Chronic disease is now the principal cause of disability, and use of health services consumes almost 80 % of health expenditures (Bodenheimer et al. 2002). Current health care is still conceptualized in terms of acute care perceived as a product processing, where the patients is a customer, who can, at best, select among the services that are offered. Yet, as Hart (1995) has pointed out, in health care the product is clearly health and the patients is one of the producers, not just a customer. As a result, "optimally efficient health production depends on a general shift of patients from their traditional roles as passive or adversarial consumers, to become producers of health jointly with their health professionals" (Hart 1995, p. 383).

The need to include consideration of function in daily life, productivity, performance of social roles, intellectual capacity, emotional stability, and well-being has emerged as a crucial part of clinical investigation and patient care. Patients have become increasingly aware of these issues. The commercial success of books on complementary medicine and positive practices as well as the upsurge of mind-body medicine exemplify the receptivity of the general public to messages of well-being pursuit. Psychosomatic interventions may respond to these emerging needs within the established medical system and may play an important role in supporting the healing process.

Medically unexplained symptoms are common in medical patients and increase medical utilization and costs (Hatcher and Arroll 2008). The traditional medical specialties, based mostly on organ systems (e.g., cardiology, gastroenterology), appear to be more and more inadequate in dealing with symptoms and problems which cut across organ system subdivisions and require a holistic approach. The interdisciplinary dimension that characterizes most rehabilitation units and pain clinics exemplifies this concept.

The benefits of modifying lifestyle by population-based measures are increasingly demonstrated (Fava and Sonino 2010; Sperl-Hillen et al. 2011; Tomba 2012). Yet, at present almost all of health care spending is directed at biomedically oriented care. Overemphasis on pharmacological treatment has led to a dangerous reductionism and overlooks the fact that therapeutic outcomes are the result of several ingredients, which may be specific or nonspecific, as outlined above. As Kroenke (2002)

argued, neither chronic medical nor psychiatric disorder can be managed adequately in the current environment of general practice, where the typical patient must be seen in 10–15 min or less.

In clinical medicine, there is the tendency to rely exclusively on "hard data," preferably expressed in terms of laboratory results, excluding "soft information" such as impairments and well-being. This soft information can be, however, reliably assessed by clinical rating scales and indexes which have been validated and used in psychosomatic research and practice (Fava et al. 2012). Box 2.5 illustrates how "hard data" and "soft information" need to be incorporated in clinical encounters. It is not that certain disorders lack an explanation; it is our assessment that is mostly inadequate, since it does not incorporate a global psychosomatic approach (Sonino and Peruzzi 2009; Fava et al. 2012). Similarly, within a biopsychosocial model, addressing the origins of disparities in physical and mental health care early in life may produce greater effects than attempting to modify health-related behaviors later or to improve access to health care in adulthood (Shonkoff et al. 2009).

Box 2.5 This Case Illustrates How the Psychosomatic Consideration of a Patient's Complaints May Lead to Better Assessment and Management

A 54-year-old woman was diagnosed with hypothyroidism. She was prescribed thyroid substitution which restored thyroid hormone levels within the normal range but kept feeling miserable, with a very bothersome globus in the throat. She consulted several endocrinologists, who all stated that her thyroid replacement was fine and there was nothing wrong with her, which made her angry and dissatisfied. She was then referred to a psychoneuroendocrinology service. Careful interviewing disclosed the presence of agoraphobia (fear of public spaces and going out alone) with sporadic panic attacks and that she attributed the globus and panic to the thyroid, adjusting herself to thyroid replacement in relation to her current feelings. She also reported marital problems. The psychosomatic assessment and physical examination led to explaining that agoraphobia is a psychological disorder, her globus was related to it, not to the thyroid, and that changing herself thyroid replacement could only make things worse. A brief course of cognitive-behavioral treatment by a psychologist did improve her agoraphobia and marital problems greatly, with disappearance of panic attacks. Only sporadic symptoms of globus related to anxiety persisted.

In conclusion, appraisal of the multifactorial determinants of the cure process may restore a trusting patient-doctor interaction, improving final outcomes. In the late 1970s, a prominent psychosomatic investigator, Morton Reiser (1979), anticipated the success of oriental medical theory and practice in the Western world and identified psychosomatic medicine as the most suitable meeting ground for the two

models. Indeed, the psychosomatic research background has consolidated over the past decades in dealing with complex biopsychosocial phenomena and may now provide new effective modalities of patient care.

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http://www.springer.com/978-94-007-6689-1

An Integrated View of Health and Well-being
Bridging Indian and Western Knowledge
Morandi, A.; Nambi, A.N.N. (Eds.)
2013, XII, 209 p.,
ISBN: 978-94-007-6689-1