



Review

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by [Ford CV](#)

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Section 1. Review articles

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Somatization and fashionable diagnoses: illness as a way of life

by Charles V Ford¹

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The history of “nondisease” dates back, at least 4000 years, to early descriptions of hysteria. More recently somatization became a part of the official diagnostic nomenclature by creation of the DSM III category, “somatoform disorders.” Somatization can serve as a rationalization for psychosocial problems or as a coping mechanism, and for some illness, becomes a way of life. One variation of somatization can be the “fashionable diagnosis”, for example, fibromyalgia, multiple chemical sensitivities, dysautonomia, and, in the past, “reactive hypoglycemia”. These disorders are phenomenologically related to environmental or occupational syndromes and mass psychogenic illness. Fashionable illnesses are characterized by (i) vague, subjective multisystem complaints, (ii) a lack of objective laboratory findings, (iii) quasi-scientific explanations, (iv) overlap from one fashionable diagnosis to another, (v) symptoms consistent with depression or anxiety or both, (vi) denial of psychosocial distress or attribution of it to the illness. Fashionable diagnoses represent a heterogeneous collection of physical diseases, somatization, and anxiety or depression. They are final common symptomatic pathways for a variety of influences including environmental factors, intrapersonal distress and solutions to social problems. A fashionable diagnosis allows psychosocial distress to be comfortably hidden from both the patient and the physician, but premature labeling can also mask significant physical disease. Hysteria remains alive and well and one contemporary hiding place is fashionable illness.

Key terms anxiety, coping, depression, environment, hysteria, somatization.

Most people prefer to be healthy and engage in a variety of behaviors that they believe will help to promote health. There is, however, a group of persons who, irrespective of their stated wishes, behave in such a manner as to make illness a way of life. These persons with “nondisease” but who have chronic illnesses repetitively seek occupancy of the sick role and its attendant rights and privileges. In the process they generate a large amount of medical care expenses, incur costs to society because of lost productivity and disability payments, and inflict psychological and dependent care demands upon those in their environment who must care for them (1).

In past decades the persons who seemed to seek a life-style of illness were known by a variety of terms, such as hysterics or invalids (2, 3). More recently the American Psychiatric Association (4) created the diag-

nostic category of somatoform disorders: psychological disorders that take the form of physical disease. “Somatization” is the current term for unexplained physical symptoms, and there has been increased interest in somatization disorders. Somatic symptoms that have no apparent physical causes are remarkably common in the practice of medicine (5, 6), and persistent somatizers are very high utilizers of both outpatient and hospital medical care (7—11). For the somatizer, even when there is evidence of physical disease, many symptoms seem more distressing or disabling than can be accounted for by objective findings (12).

This communication will explore the process of somatization and its relationship to “fashionable diagnoses”. The following brief clinical case will set the stage for a review of several of these syndromes.

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Case history

A 56-year-old wife of a prominent politician was referred for psychiatric evaluation by her primary care physician because of symptoms of extreme fatigue and low energy: "My whole body feels like jelly". She also complained of severe dizziness and claimed that several years previously she had been "unable to get out of bed for a year". Other symptoms included decreased concentration, loss of appetite with weight loss, crying spells, and sleep disturbance. She reported that she was being treated by several medical specialists and carried the diagnoses of multiple allergies, chronic fatigue syndrome, irritable bowel syndrome, fibromyalgia, esophageal dysfunction, mitral valve prolapse syndrome and dysautonomia. She described symptoms for the last diagnosis as "real hell".

The patient was notably histrionic and wore heavily applied cosmetics and gaudy costume jewelry. The style of her clothing would have been more appropriate for a woman 40 years younger. Despite her multiple physical complaints, she appeared healthy and spry.

Although she denied that it had any significance, the patient's symptoms had begun 5 years previously when the younger of her two children married and left home. Her husband was rarely home, being either at political meetings or traveling out of town. The marriage was essentially sterile, and the patient described herself as "never ever" having any sexual interest. Her childhood history included information that she had been abandoned when an infant by her alcoholic mother and that she was raised by an abusive grandmother. In contrast to apparent dependent personality features, she described herself as "obnoxiously independent". She reported that she was "always sickly" as a child and had experienced an episode of apparent hysterical paraplegia during adolescence. Medical problems as an adult included, in addition to those already mentioned, a hysterectomy for endometriosis and fibrocystic breast disease.

The patient met diagnostic criteria for major depression, somatization disorder, and histrionic personality. All of her current physical symptoms were unexplained by objective findings and could be attributed to symptoms of depression or anxiety.

The process of somatization

Somatization has been described by Katon et al (12) as a culturally sanctioned idiom of psychosocial distress. As such, the communication may be either consciously or unconsciously produced or motivated. For example, a person may consciously engage in factitious behaviors

but be unaware of the unconscious motivation of the seeking of nurturance that underlies the simulation of disease. A person with a conversion symptom may unconsciously simulate a seizure for the unconscious goal of preventing abandonment from a spouse about to make a trip.

There are many reasons why a person might employ somatization as a means of communication or as a coping strategy. These include the following possibilities:

1. Illness and attendant involvement by the medical care system may be a means by which a socially isolated person seeks an auxiliary social support system (13).
2. The sick role may be used to provide rationalizations for failures in occupational, social, or sexual functions. For example, a woman conflicted about her sexuality might use illness as an excuse to avoid marital sexual relations.
3. Illness is a means to seek gratification of dependency wishes (nurturance). In the extreme a person may surreptitiously simulate illness to obtain care from others (14).
4. Illness may be used to manipulate interpersonal relations and create power in those who have little control over others (15).
5. Somatic symptoms provide a cry for help and other forms of communication, when verbal skills, psychological sophistication, or education are limited and the articulation of one's distress is impaired (16, 17).
6. The somatic symptoms of psychological disorders may be misattributed to physical disease. For example, an "alexithymic" individual may attribute the physiological symptoms of anxiety or depression due to disease (18, 19).
7. Certain symptoms may have overvalued personal meanings. For example, a middle-aged man whose father has recently died of myocardial infarction is likely to respond to the cardiac symptoms of panic disorder differently from the response to the same symptoms by a teenage girl.
8. Stigmatization can be avoided by reinterpretation of psychological symptoms as due to physical disease. Psychological processes, unlike physical disease, are viewed by many persons as under one's control. Thus a person with psychiatric illness might be misperceived as having a weak character.
9. Overattention to bodily sensations may reflect learned behavior. Parenting styles may emphasize or minimize the importance of somatic symptoms (20). Similarly, physicians may reinforce abnormal illness behavior through exhaustive diagnostic evaluations of unexplained physical symptoms.
10. Amplification is a term used by Barsky (21) to describe the observation that some persons have an

increased tendency to regard bodily sensations as more troubling, noxious, or frightening. Amplification is very similar to the concept of negative affectivity proposed by Pennebaker & Watson (22).

11. There are also identifiable gains to many illnesses. These have been described by Dansak (23) as primary, secondary, and tertiary gains. A bodily symptom, interpreted as disease, may resolve an intrapsychic conflict such as a conflict over the expression of anger (primary gain). The symptom may elicit sympathy from others and release from usual occupational responsibilities (secondary gain). Furthermore, the symptom may be reinforced by others who benefit from it, such as an attorney (tertiary gain).
12. The experience of trauma appears to predispose to somatization. Persons who have experienced bodily injury or sexual abuse, particularly during childhood, may be more prone to unexplained physical symptoms (24).

Fashionable diagnoses

The medical historian Edward Shorter (25) has chronicled the social–medical interpretations of chronic nonspecific symptoms known as neurasthenia in the latter part of the 19th century and has now labeled it chronic fatigue syndrome (CFS). Steps along the way have included diagnostic labels such as chronic brucellosis, encephalitic myalgia, hypoglycemia, and chronic Epstein-Barr virus infection.

Medical investigations of persons labeled as having chronic fatigue syndrome have not found any consistent underlying organic causes, and immunologic studies have failed to demonstrate a relationship between Epstein-Barr virus antibodies and the psychological symptoms of CFS (26–28). However, multiple investigations have disclosed prevalent psychiatric illnesses among the sufferers of the syndrome. Manu et al (29) prospectively studied 100 patients with CFS and found that 66 had one or more psychiatric problems (mood disorders, anxiety and somatization disorder) that were considered a major cause of their fatigue, while only five patients had a medical condition believed to be the major cause of fatigue. The symptom remained unexplained for 31 patients. Kroenke et al (30) reported that fatigue is one of the most common complaints in primary care clinics. These investigators found that laboratory tests were not useful in determining the cause of the fatigue but that depression or somatic anxiety was suggested by screening psychometric tests for 80% of patients with CFS (versus 12% for referents). Chronic fatigue is a very nonspecific subjective symptom and per se is one of the primary diagnostic criteria for major

depression. Thus some overlap with psychiatric disorders can be expected. Straus (28) concluded that CFS is a highly heterogeneous disorder and that any hypothesis regarding its etiology must incorporate the psychopathology that usually accompanies it and in some cases precedes it.

Three additional fashionable diagnoses will be briefly reviewed. Fibromyalgia and multiple chemical sensitivities are currently diseases of fashion while reactive hypoglycemia is now largely “out-of-style”.

Multiple chemical sensitivities

A syndrome of predominantly subjective complaints attributed to environmental causes has achieved considerable popular interest during the past 30 years. Originally called environmental illness, it has been renamed multiple chemical sensitivities (MCS). Other terms to describe the same or similar illnesses include the total allergy syndrome, 20th century disease, cerebral allergy, chemically induced immune dysregulation, yeast disease, candidiasis, and sick building syndrome (31).

The proponents of MCS suggest that it is created by environmental toxins (modern synthetic chemicals) that cause autoimmune diseases and a dysregulation of immunological processes. Alternative theories include the idea that chemical stimulation of the olfactory–hypothalamic pathway leads to limbic dysregulation or that deficiencies of certain vitamins or minerals may cause abnormalities in the immunological system. The proposed initial insult may be a single toxic exposure or an accumulation of low-level exposure to chemicals that are generally considered safe and do not appear to affect most people (31). However, with “dysregulation” the person with multiple chemical sensitivities reacts to a large number of environmental exposures, including foods. These people may have symptoms in response to olfactory sensations such as perfumes, paints, and office machines. Their symptoms are almost always subjective and include complaints of malaise, headache, fatigue, difficulty with concentration, nausea, dizziness, respiratory and other symptoms. The lack of scientific evidence for an organic etiology has been highlighted by several authors (32–35).

The typical MCS patient is a woman in her 40s who has been having symptoms for 10–15 years. These women are generally married and well educated, often at the end of their childbearing years and with unhappy personal and marital relationships (36).

Psychiatric evaluations of MCS patients indicate a high incidence of affective and anxiety disorders and an incidence of somatization disorder many times greater than that of the general population (36–38). Simon et al (37) studied a series of 41 MCS patients who had not been selected for psychiatric symptoms. They found a current prevalence of 44% for anxiety or depressive

disorders and 25% for criteria for preexisting somatization disorder. Of note, of these carefully studied subjects, 25% showed no significant psychological disturbance. This figure is comparable for the series studied by Black et al (38), who found that, although 65% of their sample had a depressive, anxiety, or somatoform disorder, 35% did not have a psychiatric diagnosis. Thus, although underlying psychiatric issues are a prominent part of the symptoms of a majority of patients, there is no universal psychiatric symptomatology nor do psychological issues explain the symptoms for all patients. One hypothesis is that prevalent concerns about environmental issues may lead some persons, as a part of their belief system, to amplify and interpret bodily sensations as being due to environmental toxins (31).

Simon et al (39) investigated 37 aerospace workers who began to complain of symptoms and filed disability claims following the introduction of new plastic compounds into the manufacturing process. Thirteen of these claimants developed "environmental illness". These persons, when compared with the other claimants, had a higher incidence of anxiety or depressive disorders (54% versus 4%) and a large number of unexplained medical symptoms (average of 6.2 versus 2.9) before the exposure. Claimants with environmental illness also scored significantly higher on the Barsky Amplification Scale (29.2 versus 21.0, $P = 0.002$). The authors suggested that psychological vulnerability strongly influences the development of chemical sensitivity following a chemical exposure.

Terr (40) reported on the findings of 90 workers who had been evaluated because of claims of environmental illness related to work. He found that the subjects had multiple symptoms that were unaccompanied by objective findings and, further, that their medical records showed that most of the claimants had their symptoms before the alleged occupational exposure. Most claimants were diagnosed as having psychiatric disorders but, of importance, for several patients the diagnosis of "environmental illness" had obscured an undisputed genuine occupational illness!

Persons diagnosed as having MCS are characteristically treated by clinical ecologists who attempt to identify the offending chemicals so that the patient can avoid them. "Neutralizing" compounds and a variety of vitamins, minerals, hormones, and gamma globulin injections may also be prescribed (31). There are considerable negative effects of MCS and its treatment techniques. These patients have a very high rate of medical-care utilization and are occupationally and socially disabled. In the extreme, they live almost solitary lives in environmentally controlled structures. They may suffer from nutritional deficiencies as a result of their restricted diets. Despite this, they accept MCS as their way of life, which is organized around illness. Their prior chronic

psychiatric problems are rationalized as due to MCS. Their personal identities and social involvements may revolve around the diagnosis of MCS and associated support groups (41). MCS patients are often more pleased with the very expensive care provided by clinical ecologists than with the care provided by more traditional medical practitioners.

Fibromyalgia

The previously fashionable illnesses of fibromyositis, neuropsychasthenia, myalgic encephalitis, and chronic Epstein-Barr virus infection have, to a large extent, converged and coalesced into fibromyalgia syndrome (FS) (25). Closely related disorders are myofascial pain syndrome, temporal mandibular joint pain syndrome, and repetitive strain injury syndrome. All of these disorders are variations on a theme of muscle pain and fatigue that are accompanied by a variety of nonspecific symptoms. Prominent among these ancillary symptoms are sleep disturbance, morning stiffness and psychologic distress. Other symptoms often reported include gastrointestinal distress (irritable bowel syndrome) and headache.

No definite organic etiology has been demonstrated for FS. Studies that reported some differences between FS and referents, for example, muscle biopsy findings, have not been replicated. Yet, despite a lack of either objective physical or laboratory findings, the American College of Rheumatology (ACR) (42) has published criteria for the classification of FS. These criteria, based solely on the subjective sensation of "tender points", have been severely criticized by some authors (43, 44). Bohr (43) has interpreted the phenomenon of FS as merely a reflection of a general decrease in pain threshold. Irrespective of these criticisms, the ACR criteria have been viewed by some physicians and numerous patients as the legitimation of FS as a physical disorder (45). Although ostensibly benign, FS can be remarkably disabling, and many patients regard themselves as unable to work or to engage in social activities. In fact, FS patients may perceive their symptoms as more disabling than patients who have clear-cut rheumatologic diseases such as rheumatoid arthritis (46, 47). Treatment for FS is generally symptomatic and not dangerous although some patients have been prescribed systemic steroids (personal observation by author); medications that can cause orthopedic complications and initiate or worsen depression.

FS patients characteristically reject any implication that their illness is primarily due to a psychiatric disorder. Rather, they see any psychological distress they suffer as secondary to their physical symptoms. Many clinicians and investigators disagree, and the evidence for a major psychiatric component to FS is strong.

Hudson et al (48) found that 26% of the FS patients they studied were currently suffering from an episode of

major depression and that 71% had a history of major depression. Furthermore, there was a more frequent positive family history of depression for the FS patients than for control patients with other rheumatological conditions. Later Hudson & Pope (49) raised the question of whether FS might be one of the "affective spectrum" disorders. A recent epidemiologic survey found that 47.7% of persons in the general population who met the ACR criteria for FS, had current or past depression (50). Kirmayer et al (51), who compared FS and rheumatoid arthritis patients, found that the FS patients were more likely to have depression than the arthritic patients (20.0% versus 8.7%), a figure considerably below that of Hudson et al. However, these investigators did find that FS patients had many more unexplained physical symptoms, histories of surgical procedures, and visits to several physicians, features that the authors interpreted as characteristic of somatization.

Sixty-five percent of the FS subjects studied by Alfici et al (52) suffered from depression. These investigators described dependence, passivity, idealization of family relationships, obsessive-compulsive personality traits, maladaptive responses to losses and "workaholic" traits for their FS patients. FS was interpreted as a pain symptom that serves as a solution to conflict in a person who needs to deny depression. A large multicenter Italian study (53) revealed that 49% of FS patients was depressed and, as a group, the subjects also demonstrated abnormal scores on the Illness Behavior Questionnaire. The authors of the study interpreted the illness behavior of FS patients as an effort to gain external support from the health service, manipulation of interpersonal relationships, and attempts to alleviate feelings of helplessness and hopelessness.

Statistical studies may capture trends in a group yet often blur the importance of individual issues or conflicts. An in-depth investigation of two FS patients by Belgian psychiatrists led to the conclusion that the onset and perpetuation of the rheumatic symptoms were due to psychodynamic issues related to loss and depression. The authors suggested that FS patients' emotional "tenderness" is equally important to "tender points" (54).

The preceding brief review of the psychological issues related to FS suggests that psychiatric disorders, particularly depression and somatization, are very common for these patients, but they are not ubiquitous nor is there a consistent psychological pattern.

Reactive hypoglycemia

An epidemic of "reactive hypoglycemia" swept the United States during the 1960s and 1970s (55). This epidemic was fueled by the sales of millions of popular medical books that suggested that hypoglycemia caused all sorts of physical and psychological problems. Included among these disorders were asthma, arthritis,

migraine headaches, alcoholism, schizophrenia, anxiety, and juvenile delinquency (56). It was hypothesized that a meal of refined carbohydrates can cause an excessive release of insulin with a subsequent hypoglycemic reaction accompanied by a release of counter-regulatory hormones, including epinephrine. Symptoms attributed to reactive hypoglycemia included, among many others, fatigue, spasms, palpitations, malaise, numbness and tingling, diaphoresis, mental confusion, and depression. The treatment generally prescribed for hypoglycemia was a low carbohydrate diet with multiple (for example 6) small meals per day. Some physicians augmented the dietary approach with nonrational medical treatments such as injections of adrenocorticotrophic hormone (ACTH).

Concerns and preoccupation with hypoglycemia among the lay public led some researchers to investigate the relationship between blood sugar levels and psychological states. There were some early suggestions that hypoglycemia might be a psychosomatic disorder caused by emotion and strain (57). Later work from several sites, with differing types of subjects, led to fairly consistent observations that most patients of the "epidemic" had "nonhypoglycemia" (58). The picture that emerged was one in which persons who had a need to deny or rationalize psychiatric problems self-selected themselves as potential hypoglycemia patients. To reinforce the idea of physical disease, low blood sugar levels during glucose tolerance tests (that frequently occur in normal persons) were misinterpreted by physicians as having clinical significance.

Ford et al (55) carefully evaluated 30 subjects who had been diagnosed by private physicians as suffering from reactive hypoglycemia. These authors conducted detailed endocrinologic investigations and blinded psychiatric interviews (in conjunction with the Minnesota multiphasic personality inventory, MMPI) and found that few subjects had any significant degree of hypoglycemia. The majority, however, had a coexisting psychiatric disorder, mostly depression. Almost half of the subjects (14 of 30) were described as having hysterical personality patterns, and 50% of the subjects provided a history of sexual problems (59). In retrospect many of the subjects would have met current DSM-IV criteria for somatization disorder. Of significance five (16.6%) of the subjects had a previously undiagnosed significant medical disorder that at least partially explained their symptoms. Included were four patients with early adult onset diabetes and one patient who had an insulinoma.

Mayo clinic patients undergoing 5-hour glucose tolerance tests were evaluated by the MMPI (60). The MMPI scores were significantly different from those of general medical patients, and there was a frequent finding of the conversion V profile, typical of persons who displace psychological problems to physical symptoms

and who are reluctant to accept a psychological interpretation for their symptoms. No relationship was disclosed between the blood glucose levels and the patients' symptoms of light-headedness, shakiness, diaphoresis, weakness, and fatigue. Another investigation by Gross (61), of 72 consecutive psychiatric outpatients, revealed no relationship between a 5-hour glucose tolerance test (GTT) and psychological symptoms. Five patients did display reactive hypoglycemia, but these patients had no difficulty in differentiating their hypoglycemic symptoms from their psychiatric symptoms.

Current medical wisdom about reactive hypoglycemia suggests that it is a relatively uncommon disorder and that most patients with adrenergically mediated symptoms have another disorder, especially neuropsychiatric problems such as depression, anxiety, or somatization disorder (62). Low glucose values during a GTT, unless temporally associated with the patient's characteristic symptoms, are usually incidental findings that occur for normal persons. There are, however, many medical causes for genuine hypoglycemia to consider (63). To label a patient's complaint as "nondisease" or "nonhypoglycemia" or to attribute these symptoms too quickly to concurrent psychiatric problems is inappropriate.

Similarities of the three syndromes chronic fatigue syndrome, fibromyalgia syndrome and multiple chemical sensitivities

The preceding brief reviews highlight the similarities among chronic fatigue syndrome, fibromyalgia, multiple chemical sensitivity syndrome, and hypoglycemia. Apparently there is considerable overlap from one to another. A recent study compared CFS, FS and MCS and determined that all three groups were similar in demographic characteristics and physical and psychological symptoms (64). Seventy percent of the patients with FS and 30% of those with MCS also met diagnostic criteria for CFS. Patients from all three diagnostic groups were high utilizers of medical care. Stewart (65) found that, of the MCS patients whom she studied, 90% reported that they had been diagnosed with one or more additional fashionable illness.

The similarities in phenomenology that comprise the various syndromes of fashionable diagnoses can be summarized as follows: (i) symptoms are characteristically nonspecific and subjective, for example, fatigue and pain, (ii) there are no definitive physical signs or confirmatory laboratory findings, (iii) biological explanations, although superficially appealing, have not been proved or are unconfirmed or quasi-scientific, (iv) a majority of patients meet diagnostic criteria for current or past major depression or anxiety and a family history of affective disorder is common, (v) a significant minority of patients meet diagnostic criteria for somatization disorder,

(vi) patients characteristically reject any implication that psychological problems are anything other than secondary to their medical illness, (vii) a significant minority of patients, despite exhaustive investigations, continue to have no psychiatric or medical explanations for their symptoms, and (viii) some patients with fashionable diagnoses have, in fact, unrecognized underlying organic disease.

Fashionable diagnoses and mass hysteria

The phenomenon of mass hysteria, currently termed mass psychogenic illness (MPI), was first described in the form of "dancing manias" during the middle ages (66). Modern descriptions of contagious physical symptoms, for which no organic cause can be identified, have focused on settings in which persons are in proximity, for example, factories, schools, hospitals and military training facilities. Characteristic symptoms are nonspecific or subjective, such as nausea, headache, hyperventilation, or dizziness. Past reports described MPI as occurring primarily in young women, but recent descriptions include older persons and men. Characteristics of epidemic contagion include a relatively closed social unit in which there is underlying tension (anxiety), development of symptoms in an index case in response to a stimulus (eg, exposure to nontoxic fumes) with rapid spread by way of sight or sound to others who become similarly afflicted. The probability of modeling is enhanced if the index case is a leader or held in high esteem by group members. Publicity and attention promoted by the media may intensify the epidemic. Treatment of MPI involves separation of symptomatic cases from the group, reassurance with words that imply improvement rather than danger or more symptoms, and education for group members and their families as to the benign nature of the "epidemic" (67).

The symptoms and phenomenology of reported episodes of MPI have demonstrated overlap with fashionable diagnoses. For example, the 1955 epidemic of "myalgic encephalitis" was sufficiently severe to cause closure of the Royal Free Hospital in London (25).

Repetitive strain injury

More recently, during the 1980s, an epidemic of repetitive strain injury (RSI) swept workplaces in Australia (68—72). Many workers whose jobs involved repetitive movements complained of symptoms of pain, stiffness, or paresthesia of the dominant hand side, and in many cases symptoms spread to the nondominant side and other parts of the body. Commonly associated features included sleep disturbance, fatigue, headache, and mood changes. Payments for compensation and medical and

legal fees cost the Australians hundreds of millions of dollars per year and threatened severe financial damage to the government. To quote Littlejohn (72), "Routine household duties became untenable and the stress within families resulted in many divorces and gross family disharmony. Australia, a modern, proud and vigorous country, had never seen such a disabling public health problem in its recent history [p 46]"

Factors that appeared to have influenced the epidemic included suggestive influences of workers' unions, media attention, a liberal compensation system, work conditions, and personal features of the afflicted workers. Although the relevance of genuine environmental stressors could not be ignored, workers who developed symptoms often had personal issues such as anger at work conditions, conflicts over having to work versus having to care for children, and other family and maturation difficulties (71). Cleland (68) proposed that, through the process of "social iatrogenesis," trivial discomfort became transformed into a protracted and painful disability. An alternative view has been provided by Hopkins (73), who suggested that the compensation system in Australia facilitated recognition of a genuine problem while the system in the United States made it very difficult for workers to have their disabilities acknowledged.

Sick building syndrome

Environmental factors such as poor air quality, volatile toxic chemicals, and infectious agents may influence health issues for workers in a specific building (74—76). Symptoms commonly reported in connection with the sick building syndrome (SBS) include mucous membrane irritation, headache, dizziness, fatigue, irritability, chest tightness and wheezing, skin dryness, nausea, and gastrointestinal complaints.

Several clinical reports propose instances in which personal psychological issues or mass hysteria have influenced the perception or reporting of SBS symptoms. Olkinuora (77) indicated that the typical psychogenic epidemic in the workplace is characterized by a rapid onset that draws much publicity and is followed by a quick disappearance of symptoms. The large majority of affected persons are women and predisposing factors include boredom, work pressures, poor labor management relationships, impaired interpersonal communications, and a lack of social support. Norback et al (78) found psychosocial dissatisfaction to be strongly related to both the onset of new symptoms and chronicity with respect to SBS. Ambulances, fire engines, sirens, and helicopters caused the escalation of one epidemic related to feared (but not documented) toxic exposure in a workplace building (79).

Ryan & Morrow (80) cited personal factors that can contribute to susceptibility to SBS to include boredom,

poor relationships with superiors, a lack of control over the pace of work, general dissatisfaction in the workplace, and stress at home. These authors proposed that SBS may result from a complex interaction between the building, the person and the social organization of the workplace. Salvaggio (81) concluded, similarly, that a combination of physical, microbial, chemical, psychological, and other factors collectively contribute toward stress and adverse health effects of persons suffering from the symptoms of SBS.

In their review of comparisons between mass hysteria and SBS, Rothman & Weintraub (82) observed that there was considerable overlap of these two phenomena with respect to both the symptoms and personal characteristics of affected persons. They also noted that no specific cause could be identified in over 75% of the cases of SBS and cautioned that litigation is often lurking in the background of the chronic complainer.

Skov et al (83), using a questionnaire technique, found that symptoms were related to both specific environmental factors (eg, handling of carbonless paper) and psychosocial factors. Among the latter was dissatisfaction with superiors or the quantity of work. Women had a higher risk for symptoms even when factors such as job category were taken into account.

In contrast to the aforementioned studies, the work of Bauer et al (84) did not find any factors other than smoking history that differentiated workers who developed symptoms of SBS from those who did not.

Psychological factors and susceptibility to repetitive strain injury and the sick building syndrome

The brief descriptions presented of factors associated with symptomatic complaints of RSI and SBS suggest that, although adverse environmental factors may be present in the workplace, not all workers are equally affected. Psychosocial factors may play a significant role in determining susceptibility to these syndromes.

Discussion

Are fashionable diagnoses and environmentally related syndromes merely expressions of somatization? The answer to this question cannot be an unqualified "yes" although somatization does appear to play a major role in determining the degree of illness for many of the sufferers of these syndromes. These disorders can be viewed from a systems theory perspective. That is to say, multiple factors interact to determine the final common pathway of the symptom. Prominent among these determinants are factors that influence the process of somatization, as well as those of mass psychogenic illness. Simple muscle strain, exposure to mild noxious

fumes or some other genuine but not severe somatic damage can be psychologically captured by a person, amplified, and then progressively redefined until it is seen as a disabling illness.

Social factors may be prominent etiologic factors in the perception of illness. We now, as the saying goes, live in a "global village"; information travels at an incredible speed, and across cultures. New explanations for various types of distress are disseminated through mass-produced books, tabloid newspapers, and television. Television personalities (eg, Phil Donahue) become almost a part of the family for many socially isolated people. As a result, similar to the conditions common to MPI, there can be rapid contagion of symptoms by sight and sound (if not smell) and identification (modeling) with respected persons. With medical attention the symptom is reinforced by care and concern, and the medical system can become part of the person's auxiliary social support system. The symptom may be further reinforced if it leads to a fashionable diagnosis that creates social attention (playing the sick role) and participation in a patient support group. Thus, in many respects, the response to a fashionable illness may be the antithesis of recommended treatment for MPI.

Symptoms associated with concurrent (but incidental) depression or anxiety become incorporated into the fashionable diagnosis or environmental syndrome and misinterpreted as due to the perceived physical disease. This misattribution avoids psychiatric stigmatization and concurrently provides rationalizations for occupational, social, interpersonal, and sexual dysfunctions. Further gains to the person in question may include the manipulation of the behaviors of others, including the gratification of one's wishes for nurturing care. Symptoms perceived as being caused by the environment (particularly those that are related to work) can be used by persons with relatively little power (for example, lower-status jobs or subservient marital situations) to communicate anger indirectly to those who control them or towards work conditions. A disability related to work can also resolve conflict about job versus child care. Litigation not only offers the promise of financial relief, but the process itself, with encouragement from union officials and attorneys, also reinforces perceptions of illness and disability.

The descriptions highlight the complex interplay of environmentally related stimuli, individual physiological responses, and social factors. These syndromes, like the process of somatization itself, cannot be simply viewed as misattribution of depression or anxiety, due to "hysteria", or malingering, or to any other reductionistic theory (85). Furthermore, these syndromes do not fit into an either/or category in reference to medical versus psychological illness. They are simultaneously medical, psychological, and social phenomena. It is no

wonder that they do not respond to simple remedies such as the prescription of an antidepressant or anti-anxiety agent. They are much too "overdetermined" to be viewed simply as masked depression. There can be little wonder that the fashionable diagnosis appeals to both patient and physician; it provides the illusion of explanation for a complex interaction of factors that range from individual differences in sensitivity (amplification) to unresolvable issues of social inequalities. As observed by Sullivan & Katon (15), being sick can resolve more problems than it creates.

In reviewing the case illustration provided, it is apparent that many factors were operative in determining the woman's illness, and it should be no surprise that, despite numerous medical consultations, her symptoms have persisted for years.

Concluding remarks

The process of somatization is influenced by numerous factors. Somatization—the seeking of the sick role—may serve as an attempt to resolve intrapsychic, interpersonal, or social problems. Fashionable diagnoses demonstrate considerable phenomenological overlap with one to another and also with occupational or environmental syndromes and mass psychogenic illness. Similar to somatizing patients, these patients have non-specific subjective complaints and, frequently, underlying depression or anxiety and a past history of multiple unexplained physical complaints. Despite these observations many patients have some element of biological disease, and a few have significant medical illnesses that have gone unrecognized. Thus, although somatization and fashionable illnesses overlap, they are not one and the same thing.

It is proposed that patients who, in the past, were identified as hysterics or invalids have, with the facilitation of mass communications, adopted current and fashionable means by which to seek solutions to their psychosocial distress. Hysteria has not gone away, it just has a new style.

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