Current Practice

PRACTICAL PSYCHIATRY

Management of Psychosomatic Disorder

DENIS LEIGH,* M.D., F.R.C.P.

Brit. med. J., 1968, 4, 753-756

Before the management of psychosomatic illness can be described it must be understood what is meant by the terms psychosomatic medicine and psychosomatic disorder. Psychosomatic medicine came into being as a reaction to an almost exclusively mechanistic approach to illness. It serves to emphasize the psychological aspects of illness. It is synonymous with medicine if in the system of medicine is included the total assessment of the sick person, his psychology, his personality, his social relations, as well as his physical structure and function. All too frequently the psychosocial aspects of disease are neglected; the word psychosomatic stresses the importance of both body and mind in illness. Psychosomatic medicine is a way of looking at sickness, a theory of disease, seeking to shed light on the appearance, the form, and the course of the illness.

All Illness Psychosomatic

All illness comes within the purview of psychosomatic medicine; indeed, one of its tenets is that there is no real distinction between mental and physical illness. In Harold Wolff's words, "there is no basis for assuming that illness may be divided into psychosomatic and other illness, except in the most superficial sense . . . the majority of symptomatic illness, medical, surgical and psychiatric, arise in, or may be remarkably influenced by environmental circumstances perceived by the individual concerned as threatening."

Role of Change

Later work has tended to stress the role of change rather than threat, illness occurring when the individual is unable to respond appropriately to changes in his life. The quality of the change, whether painful or pleasurable, is not so important as the degree of change from one situation to another. A simple example of this is what has been called the neurosis of success, as when a man develops an illness either when his life ambition has been realized or following a period of unbroken successes.

A man aged 45 had worked in the family ice cream business all his life. Of an inventive turn of mind, he directed his efforts towards developing a new ice cream cornet which would fit the mass manufactured ice cream bars. After years of experimentation, he developed what was a difficult technical feat, the new cornet. Approaches were made by a large firm to buy the rights to the process, and the family business was eventually taken over for a large sum, the man's services being retained as a director. However, from a position of authority, he found himself a relatively small cog in a big machine. He became depressed, unable to work, and failed to respond to intensive psychiatric treatment.

The change may be fairly closely related in time to the occurrence of illness but may possibly be separated by a period of years. Severely disturbing life experiences, such as con-

centration camp imprisonment, may be followed years later by both physical and mental disorder, premature ageing, or even premature death.

Some people are more vulnerable than others to life changes. About a quarter of the population suffers from one half the illness experiences of the whole group. The detection and recognition of this vulnerable group, their personal characteristics, their background, both genetical and environmental, are one of the tasks of the family doctor.

Clustering

One other important aspect of this psychosomatic theory of illness is what is known as "clustering." Illnesses tend to occur in clusters. In general, a cluster of illness follows a period of about twelve months' life change, the cluster itself lasting for about two years. The cluster may be made up of a variety of illnesses. The more severe the life change, on the whole the more serious the illness experiences.

Form of Illness

The forms the illnesses take are dictated by stock, genetic, constitutional, and environmental factors. Thus in sub-arctic Russia certain German prisoners of war developed hypertension after exposure to cold, imprisonment, and hardship, while others did not. The asthmatic, with his inherited tendency, breaks out into asthma when he gets a cold, or a rebuff or a combination of events occur which he is not equipped to cope with.

The Psychosomatic Disorders

While this psychosomatic approach to medicine is relevant to all illness, there are a particular group of disorders, the *psychosomatic disorders*, in which the relationship between psychosocial disturbance and the occurrence of illness is particularly clear. In these conditions genetic factors are important, and disturbances of the neuro-endocrine and neuro-vegetative system are believed to play an important part in the disease manifestation. Bronchial asthma, migraine, peptic ulcer, forms of colitis, mucous or ulcerative, certain types of hypertension and of musculoskeletal disorder, rheumatoid arthritis, eczema and dermatitis, dental conditions such as Vincent's angina and periodontitis, disturbances of menstrual and sexual function, and endocrine disorders such as thyrotoxicosis, and perhaps some cases of diabetes, all come into this group.

The management of psychosomatic disorder (if the expression is to be preserved) may therefore be dealt with in two ways: firstly, in general terms which are significant for all illness, and, secondly, more specifically in terms relating to particular types of illness.

* Physician, Bethlem Royal and Maudsley Hospitals.

General Management

Preventive

The family doctor is the only medical person who is truly in a position to exert a preventive role. Knowing his families intimately, he should be able to assess the strains and stresses to which the family may be subjected and the particular manner in which each member of the family may respond with or to illness. For instance, the appearance of an individual in the surgery with a succession of minor illnesses—colds, sore throats, or boils, may lead the doctor to suspect that something is amiss in either the personal or family life. Are "A" levels approaching, with father expecting a great deal, with entry to the university at stake, and with the prospect of family financial strain? Or is the executive under pressure in a business reorganization which threatens his position? A little time spent in the patient's home, a physical examination, discussion of the problems, advice, and reassurance may serve to check what too often becomes, left alone, a vicious circle of worry, illness, worry, and more illness. In general, fatigue, a heavy work-load, personal and social difficulties and anxieties, and a lack of enjoyment in daily living are more important factors in the genesis of illness than are deep-rooted psychological disturbances, and are certainly far more amenable to control.

Developed Illness

General Setting.—The general setting in which the illness has developed, with its implications for prognosis, will affect the management.

A man of 58 had worked as a company secretary for 30 years in a formerly successful company whose profits had begun to seriously decline with little prospect of alteration. Feeling that he was too old to leave and obtain a situation at a similar salary, he impotently witnessed the decline in his company's fortunes. Personal troubles also occurred over the same period. In this setting he became constipated. Exploratory laparotomy became necessary, which revealed a pancreatic neoplasm with peritoneal seeding. He died three weeks after operation and six months after the onset of his symptoms. Management included discussion with the surgeon of the prognosis (very much affected by the life situation), advice to the wife and business associates, and the taking of decisions based on a psychosomatically determined prognosis.

This kind of life situation, in which the individual remains helpless and unable to move in the face of developing catastrophe, is frequently seen in serious illness. Either from personal or personality factors, or from sheer force of circumstances, the individual is trapped. The illness progresses rapidly and death occurs despite all efforts at treatment. The management here will involve attention to legal and business matters and the making of a will and of family arrangements. When large inheritances are involved, or when the date of death may be of legal importance, then the doctor's knowledge of the psychosocial and personal aspects of his patient's illness will be most helpful in the formulation of a correct prognosis. The doctor cannot, of course, dictate to a patient a certain course of action—what he can do is assess the situation, and on this assessment give his advice to the patient, his relatives, and his business associates.

Anxiety.—While it has been claimed that anxiety is essential to the development of neurotic symptoms or abnormal behaviour, its role in somatic illness is not so clear. Illness may undoubtedly arouse anxiety, either in the sufferer or in his entourage, which includes his medical attendants. The recognition of this anxiety and its alleviation is one of the prime functions of the doctor. He may use psychological techniques, such as reassurance, his prestige and confidence—in other words his bedside manner—or he may listen and answer questions. Resort to tranquillizers and sedatives is a disturbing feature of modern medicine; these substances should be reserved for occasional use. Referral to the specialist may serve

to allay the anxiety of both patient and family. In the pre-N.H.S. days consultants were often called in not so much for diagnosis as for this purpose. When the diagnosis is uncertain, or the family doctor is uncertain about what to do, then specialist referral serves a different function. It is only when anxiety remains uncontrollable by these various means that psychiatric referral becomes necessary.

Environmental Manipulation.—A change in the social milieu as a therapy is often advised by the doctor—let us admit, most often based on no solid foundation of evidence. A self-chosen few weeks on a health farm for the wealthier, a few weeks off work on sickness benefit for the less wealthy, a change of school for the asthmatic boy (rarely the asthmatic girl), or a change of occupation—these are the sort of measures usually understood as environmental manipulation. Apart from such temporary environmental changes, it is a change in social interaction which is most likely to be of any therapeutic value. Thus a study of the psychosocial environment may reveal that loss of security, and particularly the loss of a person of very great emotional significance to the patient, preceded the onset of illness. Any sudden decrease in the rate of social interaction—in plain English any loss of love or affection—any setback in self-esteem, may be upsetting both mentally and physically. Psychological replacement therapy—in which the losses are made good one way or another, either by the discovery of a new girl friend or by the deliberate manipulation of the psychological environment—is one aspect of environmental manipulation.

Two brothers are very close, the younger being very attached to and dependent on the older. The elder brother is given a travelling scholarship and leaves for the U.S.A. The younger brother develops his first attack of ulcerative colitis. The doctor replaces the loss of the brother by using himself, the nurses, and social workers as aids, first to support the patient in his loss, and then to enable the patient to become more independent—perhaps to develop a relationship with a similar person to the elder brother. The attack of colitis subsides.

Special attention should be paid to bereaved persons. There is ample evidence that bereavement predisposes to the appearance of illness in the survivor, who is particularly in need of some form of psychological replacement therapy during the 12 months following the loss.

Drugs.—In general this is an age of over-prescribing. We know that many patients fail to take their drugs, that one third of us are placebo reactors, and that in many conditions, given the appropriate specific medication, it is the psychosocial milieu which is of most importance for recovery. To be confident in one's doctor, to be in a comfortable bed, with good nurses, good food, and no financial anxiety concerning the illness, is far preferable to swallowing this or that tranquillizer. The relief of pain, of sleeplessness, and of anxiety will demand the use of the appropriate medication, apart from which there is little indication for the use of non-specific drug therapy. Indeed, the withholding of drug treatment may at times result in great improvement.

A spinster of 40 developed a mild depressive illness, for which over a two-year period she received an antidepressant, together with discussions concerning her life situation. Her mother was a chronic alcoholic, and her brother an unstable drifter. She improved slowly. Her brother died during this period, but she continued to improve. She suddenly became much worse, and it was decided to change her antidepressant. In the two-week period free from medication prior to the change she became quite well and has required no further medication. Discussions have, however, continued.

Specific Management

The management of conditions in which emotional disturbances play a significant part must necessarily take these factors into account. Some physicians claim that certain illnesses tend to occur in certain specific types of personality and with certain specific emotional conflicts. If this be so, and it is an idea

of great antiquity, then each condition requires a particular approach, a particular kind of doctor-patient relationship. There is little hard evidence for this view. The doctor need not concern himself with whether he should behave in this or that way to his patient with asthma, migraine, or peptic ulcer. Grief, jealousy, hatred, despair—any emotion may be associated at a particular time with bouts of headaches, or of dyspnoea or abdominal pain. The particular setting in which the emotional disturbance occurs must be recognized—it may be remediable, it may not. Management depends first upon the doctor's knowledge and understanding of human beings and their feelings, second on the doctor's self-awareness of his limitations and capacities for dealing with emotionally charged situations, and third on his knowledge of the mental impact of the illness on the patient and his family. In the psychosomatic disorders the vicious circle process is often of particular importance.

A woman of 22 developed asthma following the death of a near relative. Over the next four years three other deaths occurred. The asthma became very severe and continuous following the last of these deaths. Despite treatment with steroids and A.C.T.H. she failed to improve and was referred to the Maudsley Hospital. Here a list of psychological precipitants of her attacks was drawn up, which included the idea of death, of people being ill, of accidents, and of asthma itself. Tightness of the chest and wheezing were both anxiety-provoking stimuli, which in turn produced more tightness and more wheezing. The sequence of events might include seeing a death in the ward → anxiety → tightness of chest and wheezing → further anxiety → further tightness and wheezing → status asthmaticus.

The management of this girl included removal from a medical ward to a single room, the treatment of the anxiety concerning her attacks, and at the same time of the anxiety provoked by the losses she had suffered. Chlordiazepoxide was used as an adjuvant, whilst the steroids and A.C.T.H. were slowly reduced. The asthmatic attacks subsided, and she has remained free of attacks.

In many asthmatics the role of anxiety is central to the continuation and perhaps the severity of the attacks. The frequent recurrence of a terrifying difficulty in breathing leads to a state of constant apprehension—technically a state of high arousal—so that any anticipated event, painful or pleasurable, may result in asthma. Management in asthma is first the management of anxiety, and secondly of any specific life disturbances clearly related to the onset and persistence of the attacks.

Referral to a physician especially interested in bronchial asthma—whether his interests are primarily in allergy, chest infection, or emotion—should be made when there is a poor response to treatment, much anxiety in the family, or persistence of attacks for longer than 48 hours. The patient should be referred for thorough investigation if possible in asthma-free periods.

In *migraine* fatigue seems to be the setting in which an attack is often precipitated. Advice on the avoidance of situations which the individual finds fatiguing and explanation of what is known about migraine will help the sufferer and his relatives to endure this incurable condition. A routine for dealing with a developed attack should be planned and put into effect so that there is as little disturbance of the individual and family life as possible. Simple measures, such as the avoidance of coffee or tea, fluid restriction, or a discussion with the family on how to cope with an attack, together with the prescription of a regular dose of 30 mg. phenobarbitone nocte may reduce the frequency of attacks. Referral to a psychiatrist is only very exceptionally useful, and should be reserved for the occasional unusual or bizarre case, for status migrainosus, or where drug addiction or dependence has developed.

Skin conditions such as psoriasis, atopic eczema, or urticaria must be managed in general as straight physical illnesses, as indeed they most probably are. Of the three conditions, urticaria is most commonly regarded as psychosomatic in origin—in fact, it is almost totally unresponsive to psychiatric

treatment, despite the claims which have been made. The role of psychological factors in these conditions has been much over-emphasized—partly as a result of their unknown aetiology, and partly because the patient often describes them as “nervous” rashes. What psychiatric symptoms do occur are almost always secondary—either to the irritation, the disfigurement, or the patient-doctor relationship. The use of a mild tranquillizer, and particularly of a hypnotic so that scratching during sleep is minimized, discussion, and explanation are helpful in management. The manner in which the doctor handles the patient with skin eruptions is important in determining patient-doctor attitudes. The hostility which psychiatrists so often see as a determining factor underlying psychosomatic skin eruptions is almost certainly secondary to the patient's encounters with the medical milieu. The doctor should be familiar with what nakedness, skin blemishes, and the different areas of the body which are affected might mean to the individual. Physical contact—the handling of the eruption by the doctor—is a method of rapidly establishing rapport by showing the patient that the doctor is not revulsed by, or afraid of, the disease.

Peptic Ulcer.—Despite the fact that most doctors and peptic ulcer sufferers realize that the illness is basically psychosomatic in nature, it is strange how unprepared either group is to accept the implications of this view. Management is consequently difficult. Diet, alcohol, smoking, and worrying—the patient understands their effects probably better than the doctor. Explanation is therefore of little use. In general, the best management consists of the doctor accepting the situation, of tolerating dietary and other indiscretions, and of protecting the patient from overtreatment. Attempts to deal with the psychosocial situation are most often unsuccessful and are resented. The peptic ulcer patient is grateful for and is helped by a physical examination, much in the manner that the hypochondriacal individual is comforted. Haematemesis and perforation only serve to draw the doctor's attention to the emotional components of the illness; their management remains basically somatically determined.

Obesity.—Fashion or other cultural factors may determine the demand for treatment of what is largely a matter of self-control. Family patterns of eating, greed, gluttony, or plain enjoyment of food are more relevant than psychosomatic factors in most fat people. It is arguable whether the anxiety created by doctors and the popular press in their emphasis on the connexions between overweight, disease, and mortality is justified, for patterns of eating have been laid down in infancy and are notoriously difficult to alter except by an effort of will. Reassurance, alleviation of guilty feelings, and acceptance of patient-imposed regimens—even if cranky—are more important than continual reinforcement of anxiety by demands made on the patient to lose weight.

Childhood Disturbances.—The various psychosomatic disturbances of childhood, such as enuresis, abdominal pains, constipation, and headaches, are often clear reflections of the environmental situation of the child—his position in the family, his relationship with parents and siblings and with his school. Conscious factors must be taken into account far more than in adults. The deliberate production of symptoms is not at all uncommon, though this may only be admitted much later in life. In general it is unwise to regard a symptom as psychosomatic in nature until and unless any physical cause has been excluded. Caution, temporizing, the avoidance of medication on unclear indications, and the management of the mother is sound medicine.

Conclusions

Management of illness is based on a knowledge of its specific and non-specific aspects. The influence of psychosocial and environmental factors on the appearance of the illness must be

recognized and dealt with. So too must the doctor recognize the influence exerted by the illness itself—through the pain, the respiratory distress, the fear, depression, or paralysis which are its manifestations—on the patient and his environment. The handling of the sick person depends on our awareness of these aspects, our knowledge and experience of them, on our patience and our flexibility. In practice this means that the doctor must listen to his patient, get to know him, his background and present life; must examine him physically—be the examination limited to a finger, or covering the whole body, it is the care and the confidence with which it is done that matters. The doctor must encourage questions, and must answer them to the best of his ability; must seek the patient's view of himself, of his illness, and sometimes of his medical experiences. What does he expect from the doctor, why has he come, and what sort of treatment does he himself feel that he requires? In addition, at least one member of the family must be chosen as a family representative through whom information may pass to and from the doctor. These are the techniques on which the art of medicine is based.

Selected Reading

There is no comprehensive up to date account of psychosomatic medicine in textbook form in English. The following list of references contains the factual material on which the statements made in the article are based.

Association for Research in Nervous and Mental Diseases, *Life Stress and Bodily Disease*, 1950. Baltimore.
Dunbar, F., *Emotions and Bodily Changes*, 1954, 4th ed. New York.
Groen, J. J., *Psychosomatic Research*, 1964. Oxford.

Halliday, J. L., *Psychosocial Medicine*, 1948. London.
Hinkle, L. E., jun., Wolff, H. G., *Arch. intern. Med.*, 1957, **99**, 442.
Hinkle, L. E., jun., Wolff, H. G., in *Explorations in Social Psychiatry*, 1957, p. 105, ed. A. H. Leighton, J. A. Klausen, and R. N. Wilson. New York.
Hirt, M. L., *Psychological and Allergic Aspects of Asthma*, 1965. Springfield, Ill.
Rahe, R. H., McKean, J. D., and Arthur, R. J., *J. psychosom. Res.*, 1967, **10**, 355.
Simmons, L. W., Wolff, H. G., *Social Science in Medicine*, 1954. New York.
Weiss, E., English, O. S., *Psychosomatic Medicine*, 1949 2nd ed. Philadelphia and London.
Wolf, S., Cardon, P. V., jun., Shepard, E. M., and Wolff, H. G., *Life Stress and Essential Hypertension*, 1955. Baltimore.
Wolff, H. G., *Stress and Disease*, 1953. Springfield, Ill.
Wolff, H. G., *Arch. Neurol. (Chic.)*, 1961, **5**, 235.
Wolff, H. G., *Headache and Other Head Pain*, 1963, 2nd ed. New York.

B.M.J. Publications

The following are available from the Publishing Manager, B.M.A. House, Tavistock Square, London W.C.1. The prices include postage.

<i>The New General Practice</i> ...	Price 16s.
<i>B.M.J. Cumulative Index, 1967</i> ...	Price 30s.
(15s. to B.M.A. members)	
<i>Porphyria—a Royal Malady</i> ...	Price 13s. 6d.
<i>Is There an Alternative?</i> ...	Price 7s. 6d.
<i>Treatment of Common Skin Diseases</i> ...	Price 10s.
<i>Obstetrics in General Practice</i> ...	Price 32s. 6d.
<i>Child Care</i> ...	Price 32s. 6d.
<i>Charles Hastings and Worcester</i> ...	Price 3s. 6d.

ANY QUESTIONS?

We publish below a selection of questions and answers of general interest.

House-dust Mites

Q.—What particular content of house-dust is most hospitable to dust mites, and does the situation of the dust—that is, in blankets, carpets, mattress, etc.—make any difference?

A.—Many kinds of mites occur in house-dust, but the most frequent and most abundant species found is the pyroglyphid mite *Dermatophagoides pteronyssinus*.^{1,2} This feeds and develops on the desquamated human skin scales present in the dust and probably also on animal epidermal products when these occur. Secondary mite species which may be present include those associated with stored food and other products, like the flour mite *Acarus siro* or the copra mite *Tyrophagus putrescentiae*, those which are scavengers or feed on fungi or are predators of other species, and those which, like plant or soil mites, occur in house-dust by accident.

With regard to the question of whether the site of collection affected the numbers of mites present, recent studies in Great Britain¹ showed that *D. pteronyssinus* occurred in greater numbers in dust from bedrooms than from living-rooms, and that it was particularly abundant in mattress dust—that is, dust brushed from the surface of mattresses. In such situations samples a few hundred milligrams in weight sometimes yielded several thousand mites.³

The probable reasons for the greater abundance of the mite in mattress dust are (1) that mattresses, because they are in close contact with the human body and less subject to disturbance and cleaning than other

furnishings, are more apt to harbour greater quantities of skin scales, and hence of mites, than other furniture, and (2) that because of this contact temperature and humidity conditions favourable for the development of *D. pteronyssinus* are maintained at the surface of the mattress.

REFERENCES

- Maunsell, K., Wraith, D. G., and Cunningham, A. M., *Lancet*, 1968, **1**, 1267.
- Voorhorst, R., Spiekma, F., Th. M., Verekamp, H., Leupen, M. J., and Hyklyema, A. W., *J. Allergy*, 1967, **39**, 325.
- Wraith, D. G., Maunsell, K., and Cunningham, A. M., *Acta allerg. (Kbh.)*, 1968. In press.

Components of Tobacco Smoke

Q.—What are the components of cigarette tobacco smoke? Can they be separated and identified by chromatography?

A.—Tobacco smoke as it leaves a cigarette is a two-phase system—a particulate phase, consisting of fine spherical droplets (5×10^9 particles/ml. with a size range 0.1 to 1.0 μ), dispersed in a vapour phase. The ratio of volatile substances in the two phases varies with the degree of dilution of the smoke with air and the age of the aerosol.

The number of compounds present and their chemical structure will probably never be known, and, indeed, can vary with smoking characteristics, such as puff volume and frequency, which determine the burning temperature. The thousand or so compounds already identified¹ represent only a small percentage of the total.

The complexity of tobacco smoke can be understood when one considers that tobacco, itself made up of a very large number of components, is subjected during smoking to incomplete combustion at about 800°. Many unstable molecular fragments are formed by thermal cracking. These can react together in a large variety of combinations, and they, or some of their reaction products, may undergo oxidation to compounds capable of condensation to give still further products. Other components of tobacco such as nicotine, terpenes, long chain esters, and long chain hydrocarbons (waxes) distil into the smoke unchanged.

There are a number of comprehensive reviews giving tables of selected groups of known constituents such as aliphatic and aromatic (including polycyclic) hydrocarbons, alkaloids, terpenes, phenols, etc. In addition to the review by Stedman,² a book by Wynder and Hoffmann³ deals with both the chemical and biological aspects of tobacco smoke.

Since tobacco smoke is such a complex mixture, successful separation of its components using a single chromatographic technique cannot be expected, and a considerable amount of preliminary fractionation of the condensed smoke must first be undertaken. Chromatography applied to subfractions containing components with related chemical and physical characteristics provides a practical technique for the isolation and identification of the major constituents only.

REFERENCES

- Bentley, H. R., and Berry, E. G. N., *The Constituents of Tobacco Smoke: An Annotated Bibliography*, Research Papers No. 3, 1959, Supplements 1 and 2, 1960, and 1963. Tobacco Manufacturers' Standing Committee, Tobacco Research Council.
- Stedman, R. L., *Chem. Rev.*, 1968, **68**, 153.
- Wynder, E. L., and Hoffmann, D., *Tobacco and Tobacco Smoke*, 1968. New York and London.