

REPORT ON PSYCHOSOMATIC MEDICINE

BY MILTON L. ZISOWITZ

MOST general practitioners admit that between a third and a half of the patients they see from day to day suffer more from emotional than physical pathology. Dr. Flanders Dunbar, of the Department of Medicine and Psychiatry at Columbia University, says that those with special training in psychosomatic medicine would raise the figure to at least 80 per cent.

Drs. Edward Weiss and O. Spurgeon English of the Temple University Medical School maintain that about a third of the patients who consult a physician do not have any bodily (somatic) disease to account for their illness. These are the so-called purely "functional" cases. Approximately another third, according to these authorities, have symptoms that are dependent partly upon emotional and partly upon organic conditions.

Brigadier General William C. Menninger, formerly chief psychiatrist of the United States Army, reports that a survey of Army hospitals, conducted by internists, showed that 25 to 50

per cent of cardiovascular cases, 10 to 30 per cent of gastrointestinal cases, and 5 to 15 per cent of orthopedic cases were functional. He believes that the figures would have been even higher had the survey been conducted with the aid of psychiatrists rather than by internists alone.

It is with this problem, the relationship between body and mind in causing illness, that psychosomatic medicine is concerned. It must be emphasized that the physicians who are interested in this field do not contend that either the mind or the body alone is the predominant cause of disease. Psychosomatic medicine merely recognizes that the patient must be considered as a human being rather than simply as a fortuitous collection of organs. In other words, the physician treats not only the ulcer, but the patient who has the ulcer, in order to effect a real cure.

It was in the nineteenth century that overemphasis on separation of mind and body in medical treatment was given backing by the work of Pasteur and Virchow. Pasteur proved

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the bacterial origin of many diseases, and Virchow demonstrated that a large number of bodily disorders are associated with structural changes in the cells. Under their influence medicine began to confine its search for the causes of human ailments to the body alone. And the influence of Pasteur, Virchow and their followers still largely determines the education and the thinking of those in the medical profession.

II

But there were men who refused to believe that the mind and the body were independent of each other, and who supported their skepticism with experimental evidence. One of these was an American Army surgeon named William Beaumont. On June 6, 1822, while he was stationed at Fort Mackinac in the Northern Michigan Territory, an 18-year-old trapper named Alexis St. Martin was wounded when a shotgun was accidentally discharged. The blast tore through the youth's side, and an opening was made directly into his stomach. Miraculously, St. Martin survived, and Beaumont began a series of experiments which were to last eight years. Through the "window" in his patient's abdominal wall, the doctor was able to observe the stomach in action — its reactions to various foods, its motions, its secretions, and the general influence of mental and emotional disturbances upon the internal processes of digestion.

More than a hundred years later, Dr. Harold Wolff of the Cornell University Medical School was able to enlarge upon Beaumont's experiments when a patient, who so burned his esophagus by drinking scalding-hot fluid that it became permanently sealed, had to have a surgical opening made in his stomach in order to eat. Tom, Dr. Wolff's patient, was forced to eat by tasting and chewing food and then expectorating it into an ordinary kitchen funnel inserted into the opening of his stomach. Dr. Wolff was thus able to demonstrate the relation of gastric juice secretions and emotional states (a phenomenon which the great Russian physiologist, Pavlov, has illustrated in his experiments with dogs). He also found that psychological disturbances caused other alterations in the physiology of the stomach.

When Tom became resentful, or hostile, or enraged, the lining of his stomach became gorged with blood — it blushed, just as his face did. When Tom was frightened or anxious, his stomach as well as his face became pale. By creating and curing ulcers in Tom's stomach at will, Dr. Wolff was able to prove experimentally the theory of the psychiatrist, Dr. Franz Alexander, that peptic ulcers can be caused by emotional difficulties, and can often be healed by removing the psychological bases of their origin.

While the work of men like Beaumont, Pavlov and Wolff was chiefly concerned with the effect of the mind on the gastrointestinal system, the

fifty years of research carried on by the late Professor Walter B. Cannon showed that other organs and organ systems were also vitally affected by psychological factors. Dr. Cannon and his co-workers at the Harvard Medical School showed how emotional disturbances can affect the body's heat-regulating mechanism, the blood stream, the muscles and the heart. He conceived of the major emotions as a kind of emergency mechanism preparing the body for combat or flight.

Under the influence of fear, rage or pain, the adrenal glands pour out their hormone into the blood stream. Operating through the sympathetic nervous system, this secretion accelerates the action of the heart, increases the rate of respiration, raises the level of blood pressure and blood sugar, and enlarges the capacity of the muscles for strenuous action. If the danger is imaginary, however, or such that no fight or flight takes place, these changes are likely to result in physiological disturbances which may become chronic and result in bodily disorders. In this way, for example, a teacher, constantly aware that he must be patient and kind, throttles his blood vessels instead of his recalcitrant pupils and thereby may develop circulatory disorders.

Even more important, perhaps, than the experiments upon specific organs and organ systems which Cannon carried out, was the concept he developed of *homeostasis* — the notion that there is a dynamic interrelation between the psyche and soma

and the external environment which must be taken into account if illness is to be treated effectively. This concept of homeostasis is the foundation of all current thinking and research in psychosomatic medicine — this, and the profound insight into the mind and emotions of man which was given to science by the investigations of Sigmund Freud.

III

The fact that "nervousness" affects the cardiovascular and gastrointestinal systems is so well known to physicians and many laymen that there is no need to labor the point. But recent investigations, especially those which Dr. Flanders Dunbar has been conducting for more than fifteen years at the Columbia Medical Center, show that the heart and stomach are not the only mirrors of man's emotions.

When she began her investigations in psychosomatic medicine, Dr. Dunbar decided to use the patients in fracture and accident wards as a control group. Her studies soon led her to suspect that other than purely "accidental" factors were involved in causing accidents. She and her associates found that neither environment nor chance determines the incidence of accidents to nearly so great a degree as is commonly supposed.

Industrial reports show not only that a small percentage of the employees suffer a large proportion of the accidents, but that those workers

who have the worst factory records also have the greatest number of mishaps away from their work. Reports by insurance companies, the National Research Council, and the British Industrial Health Research Board reveal that from 80 to 90 per cent of all accidents are due not to defective machinery, or physical or mental disability, or the worker's lack of skill, but to some unexplained personal disorder.

A large trucking company reported its accident rate reduced by 80 per cent after it had transferred the 5 per cent of its drivers with the poorest safety records to non-driving jobs. But it was found that the men who had been shifted began to have personal instead of traffic accidents. All this evidence convinced Dr. Dunbar that there was such a thing as an "accident habit," and that the chief factors in its causation were psychological.

Mrs. M. thought that she was just unlucky. Married to a prosperous business man, she spent most of her time in philanthropic work. But for years she had been plagued by accidents. Once she stubbed her foot on the bathtub and broke a toe. Another time she cut her finger while she was manicuring her nails and the wound became seriously infected. Getting out of a taxicab, she fell and fractured her ankle. There were numerous other mishaps, minor and serious. Finally, a doctor using the psychosomatic approach elicited from her the admission that her life as a clubwoman did not

satisfy her. What she really wanted was to stay at home, raise a family and be a comfortable housewife. When she and her husband adjusted their lives to meet her subconscious desires, she became really happy and her "bad luck" disappeared.

One of Dr. Dunbar's patients had had five miscarriages. Physical examinations and laboratory tests showed that there was nothing organically wrong with her. What the tests failed to reveal, however, was that subconsciously the woman did not want a child. As a writer, she felt that an infant would interfere with her work and compete for her husband's love. After psychiatric treatment she not only carried through a successful pregnancy, but also found that her writing improved and her married life was happier.

IV

Workers in psychosomatic medicine are accumulating evidence to show that many other ailments are largely psychological in nature — diabetes, respiratory disorders, skin ailments and arthritis. The tale of the man who was afflicted with "rose fever" and went off into paroxysms of sneezing when paper flowers were brought into his room is a classic among allergists. A migraine headache or a sudden cold frequently enables a patient to evade some especially onerous task. A long stay in a tuberculosis sanitarium is a convenient way to escape the problems of modern living.

In a paper published in the *Journal of the American Medical Association*, Dr. A. E. Bennett, director of the Neuro-Psychiatric Research Foundation of the Bishop Clarkson Hospital in Omaha, says: "Mistakes in diagnosis and treatment of patients with . . . psychosomatic, or actual psychotic disorders are so common as gravely to discredit the acumen of the medical profession." Dr. Bennett supports his contention with a study of 150 typical cases treated in the psychiatric department of a general hospital. These 150 men and women had had a total of 496 medical treatments, 244 surgical treatments, and 71 treatments by cultists and others before coming under psychiatric care. Dr. Bennett states that while it is difficult to show that the surgical treatments were unnecessary, the removed organs being no longer available for examination, a large number of the medical treatments were completely uncalled for and useless.

He cites the case of a man who had been in bed for six weeks, unable to sleep without sedatives. He walked with a shuffling, stooped gait, and complained of burning throat, twitches, fearful headaches, severe constipation and pressure under the ribs. He feared heart disease. After a complete hospital examination, two internists could find nothing wrong with him and referred him to the psychiatric service. Previously, he had consulted eight doctors and had received the following diagnoses and treatments: toxic and acid condition

— laxatives and cathartics; gall bladder trouble — diet and pills; toxicity from a hyperacid condition and spastic colon — diet, diathermy and colonic irrigations; goiter — doses of iodine and proposed surgery. After thirty-eight days of psychiatric care, the patient was discharged, and a follow-up three years later found him perfectly healthy.

Aside from the suffering brought upon patients and their families, mistreatment of psychosomatic disorders places a tremendous financial burden on the community. "The question is not," says Dr. Dunbar, "whether we can afford psychiatric care — it is, rather, whether we can afford to do without it." The psychosomatic approach in medicine can save hospitals thousands of dollars annually.

In one state hospital a psychiatrist was allowed to treat an average of 146 out of some 3500 patients admitted annually. In so doing he reduced the hospitalization time of these patients by 44 per cent, saving the community \$8465 per year. Dr. Dunbar estimates that 80 per cent of all patients in general hospitals should receive psychiatric service. She tells of a boy, nine years old, who had cost his parents \$6000 and social agencies another \$4000 for what was supposedly heart disease. He was cured after ten visits to one of those medical centers which has learned the wisdom of maintaining a psychiatrist on its staff. Contrary to popular belief, psychosomatic treatment is very seldom either a lengthy or an expensive cure.

Why, then, has the medical profession been so reluctant to recognize the need for treating both psyche and soma? The organic tradition is so deeply entrenched, in both our medical schools and hospitals, that many doctors still sneer at psychiatry and its practitioners. Even the ten American medical schools which lay greatest emphasis on undergraduate psychiatric training devote an average of only 4 per cent of their time to the study of the human mind. But more psychiatric training in the medical schools will not, in itself, remedy the situation.

General Menninger, who was impressed by the conspicuous absence of Army physicians with adequate training in psychosomatic medicine, suggests that a general educational program be instituted among all

physicians. Dr. Dunbar points to the work of the society which publishes the *Journal of Psychosomatic Medicine* as an example of the way in which physicians in all specialties can pool their knowledge.

But doctors alone can do little without the aid of an enlightened public. The stigma which is still attached to mental and emotional ailments causes patients to look askance upon any physician who tells them that their personalities rather than their bodies are ailing. Patients would much rather have heart trouble or stomach ulcers than neuroses. They boast of their allergies but are ashamed to admit they have been treated by a psychiatrist. When mental illness is no longer considered disreputable we can be certain of receiving more intelligent medical treatment.

CHRISTMAS CAROL

BY FRANCES FROST

THE wise men now on camels
Come no more to seek
the young child in the manger,
the gentle and the meek.

The physicists in secret
devise a splendid plan
to desolate the planet
and to extinguish man.

No star of love burns steadfast
above the earth; but high,
mankind's brief eyes behold this night
the mushroom in the sky.