



From the Desk of Dr. Stephen Sinatra

Stress A Cardiologist's Point of View

Stephen T. Sinatra, M.D., F.A.C.C., F.A.C.N., C.N.S., C.B.T

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Stress

A cardiologist's point of view

This section is reserved for commentaries and brief essays dealing with matters of interest to physicians. Material for consideration should not exceed five double-spaced typewritten pages. An honorarium of \$75 is offered at the time of publication. Submissions should be addressed to: Editor, POSTGRADUATE MEDICINE, 4530 W 77th St, Minneapolis, MN 55435.

Stephen T. Sinatra, MD

The word is out: Stress is "in" as a major coronary risk factor. Every informed person has had a conversation about whether he or she is a Type A or a Type B personality, and everyone has taken a magazine test to determine his or her own stress quotient. Stress has become a marketable topic of interest to those who need help handling a life filled with pressures and expectations.

But stress is also a time bomb, ready to manifest itself in a myriad of illnesses. Generally, persons most in need of help will not see themselves in magazine tests—at least not until they find themselves in a physician's office being treated for anything from rashes and headaches to heart disease and cancer.

There can no longer be any doubt that a relationship exists between personality, stress, and disease. Recent surveys^{1,2} have indicated that stress accounts for approximately 80% of all office visits. While this figure may be new, the premise is not. For centuries, psychosocial and behavioral factors have been known to influence disease. Maimonides, in his essays on health and youth,³ concluded that "emotional disturbances cause marked changes in the body"; Hippocrates, in 400 BC, stated that "meditation heals evil thoughts, sadness and woes."

The physician has long been looked on as a healer who can treat and even cure disease with specific routines and medicines. Generally, the cause has not been considered as important as the cure. Today, however, these two aspects of disease or illness are no longer isolated from one another: The cause can be vital both to the cure and to the patient's on-

going well-being. The physician of the 80s must look at the underlying cause—at the stress—that contributes to the disease and then help the patient recognize and modify inappropriate behavior. This is a major challenge for the contemporary physician and a significant move in the direction of preventive medicine.

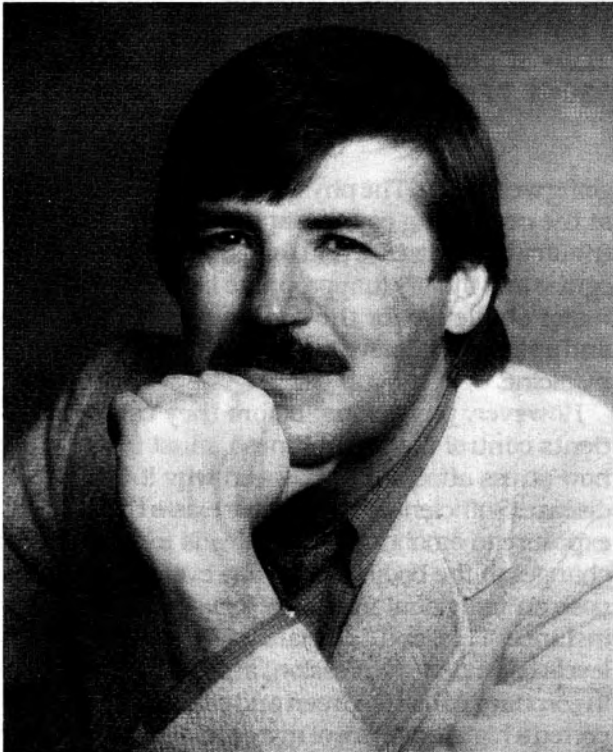
However, physicians, before they can help patients control their own illness, must understand how stress affects the body and why it can lead to disease. Sufficient evidence now exists that chronic exposure to emotional stimuli leads to biochemical changes in the body, which may eventually predispose an individual to a pathologic condition.^{4,5} For instance, Thiel and associates⁶ have described high levels of anxiety, depression, and sleep deprivation in coronary patients; Green and colleagues⁷ have reported a high incidence of myocardial infarction and sudden death in depressed individuals with sudden changes in psychologic arousal.

These studies reinforce the importance of strengthening a patient's coping mechanism as a way of alleviating illness and even preventing death. They also show that disease does not just happen. Although many diseases have a congenital, nutritional, or infectious origin, the diseases of the 20th century often result from the individual's ongoing violation of the laws of nature. Maladaptability and stress are a part of this violation and, therefore, of the disease process. However, both the physician and the patient may be unaware of how the patient's personality and reactions to life experiences have created stress and may lead to illness.

Stress is a reaction to social change, threat, or uncertainty and frequently causes an imbalance

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An individual's personality and behavioral patterns are cardinal factors in the determination of disease.



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Stephen T. Sinatra

Dr Sinatra is clinical cardiologist at Manchester Memorial Hospital, Manchester, and Mt Sinai Hospital, Hartford, and assistant clinical professor of medicine, University of Connecticut School of Medicine, Farmington. His interests include biobehavioral cardiology and the role of stress, behavior, and character type in the genesis of cardiovascular disease. He is currently coauthoring a book entitled *Heartbreak and Heart Disease*.

between the individual and the environment. Because positive as well as negative events can cause stress, some stress is desirable; life would be dull without it. However, if the stress becomes overwhelming, or "dis-stress," body defenses may respond with an alarm reaction involving elaboration of hormones, which may dispose the individual to illness. For instance, the exaggerated fight-or-flight response of our ancestors has become a suicidal

reaction in contemporary society, with individuals overdosing on their own adrenaline. Experimental studies⁸ have shown an association between suppression of lymphocyte function and changes in immune function, with resultant decreased resistance to viral or bacterial infections.

While stress has always been a factor in disease, it appears to be significantly more so today. Much of this is simply related to the times in which we live. The 20th-century personality is ready to communicate and compete at any given moment. Business is high-level and structured; leisure time is active and competitive. Little time, if any, is devoted to complete relaxation or to casual conversation. Everyone is on the move; everyone is in a hurry. Hence, the modern-day personality is frequently defined as exhibiting Type A, coronary-prone, or aggressive-narcissistic behavior.

Of course, the stressful stimulus itself does not create an illness response; it is the individual's reaction to the stimulus. An individual's personality and behavioral patterns are cardinal factors in the determination of disease, particularly cardiovascular pathology.⁹ Therefore, individuals will have different degrees of susceptibility to various illnesses based on their own characteristic response to various stressors. For instance, it is known that persons with considerable fear and depression get sick more often and have a significantly higher incidence of disease than the general population. This is particularly true of widows and widowers who have withdrawn from society after the death of a loved one.¹⁰

If individuals can contribute, however unwittingly, to their own illness, they can also trigger the mechanisms of the mind that heal the body and keep it well. Channeled correctly, the emotions and reactions that hurt the body can also heal it. The trick is to find a positive force in something negative, no matter how small; to laugh at yourself and not take everything quite so seriously; to communicate honestly and not internalize personal or

work pressures; and to reach out and love and, in return, accept the sincere affection of others. These are the positive forces and emotions that heal.

These are also the forces that create a vital and challenging role for today's physicians, for they must find a way to unearth and mobilize the positive forces in their patients who exhibit disease as a consequence of a negative reaction to stress. They must step beyond diagnosis and treatment by actively dealing with the cause of the patient's illness. They need to support the patient's feelings and emotions without judgment or editorialization, realizing that they cannot take away the patient's stress, past or present, but can provide the time and space to explore the negative forces, attitudes, and beliefs—as well as the destructive personality traits—that have contributed to the illness. The effects of prolonged suppressed emotions, energetic blocks, and muscular tension are expressed in the body armor and should be understood in relation to the disease process. The physician and the patient must become partners in the treatment and control of the disease. Only then can health truly be effected and well-being maintained. **FGM**

Office address: Stephen T. Sinatra, MD, 767 Main St, Manchester, CT 06040.

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