Stress: How to Manage A Modern Dilemma

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As we approach the 21st century, stress and its related dysfunctions represent perhaps the most serious challenge to the resources of our contemporary society. A major reason for this is the direct and/or indirect role stress plays in contributing to sickness, disability, death and the loss of production in the work place.

Stress is a major factor in approximately 85 percent of all human illnesses. In the United States at least 20 million people suffer from severe stress-induced physical illnesses. Production loss from stress-induced physical illnesses have been estimated at a minimum of $60 billion annually.

Although stress can, in some cases, be detrimental to health, we cannot live without it. It is our varied reactions to stress that create the will to achieve goals. Stress adds an excitement or flavor to life. In short, stress presents challenges to our adaptive resources. It is important to note, however, that it is the way we manage stress that helps to determine if we enjoy healthy or unhealthy lives.

Although not often discussed, some stress is essential to life, growth and productivity. For example, in the theater, stress helps performers to give their best by stimulating them to perform at an optimal level. This "good" stress is "eustress" (from the Greek word "eu" for good).

Stress obviously does not just happen any more than a candle simply ignites itself. A series of events occur on an individual level, beginning with a trigger or stressor (internal or external), leading to a bodily reaction and ultimately to the dysfunction stage.

The basic nature of stress poses certain real problems. For example, given the subjective and individualized nature of the stress process, events that cause stress in one individual may not necessarily cause stress of a similar kind and magnitude in another individual. Also, given this variability, it is difficult, if not impossible, to assess beforehand an individual's stress tolerance level, thereby designating a tailor-made stress management schedule.

Stress-Society Dilemma

Several conditions underscore the dilemma that chronic stress poses for contemporary American society. These include the incidence of psychosomatic disease, the prevalence of seriously maladaptive coping measures and the economic loss to business.

The seriousness of the situation is exemplified by a report from the President's Commission on Mental Health. It concluded that America's mental health problem is not limited to those individuals with disabling mental illness and psychiatric problems. On a broader level, it includes Americans suffering from alcohol, tobacco and drug misuse; obesity; overweight and overeating; social isolation; anger and hostility.

In the case of stress-related physical dysfunctions, the mounting problems posed for society are grievous. For example, following reports by G.R. Elliott and C. Eisdorfer, an association has been made between stress and cardiovascular disease and cancer — the number one and two killers of Americans, respectively. Stress has also been implicated in the onset of rheumatoid arthritis, ulcers, colitis, diabetes, sexual dysfunctions, Raynaud's syndrome and asthma.

On a behavior-related level, evidence of the stress-society dilemma is equally compelling. In terms of drug usage, approximately 50 percent of all visits to primary care physicians in America not only have the commonality of personal distress, but also involve the use of tranquilizers as the most common mode of treatment.

A United States Senate report stated that approximately 15 percent of Americans have used tranquilizers at least once. Along with the tranquilizer Valium, Inderal and Tagamet are the other best-selling prescription drugs. These two latter drugs are associated with the stress-affiliated conditions of hypertension and ulceration, respectively.

The extensive use of tranquilizers has been attributed to maladaptive coping schemes. The facts indicate that at first our mind and body get strung out from stress, and then we turn to tranquilizers to ease the pain.

Suicide can be one form of maladaptive coping effort as a final answer for some people to rid themselves of the ugly fabric of their lives. At least 25,000 Americans commit suicide each year — roughly 70 per day — about one every 20 minutes. This excessively high suicide rate represents still another reason to underscore the need to understand the full effects of stress and to develop new ways to manage stress in day-to-day activities.

The human and economic costs of stress are very clear. According to the U.S. Department of Health and Human Services, on-the-job stress is a major cause of heart disease. The American Heart Association estimates that absenteeism due to heart related disease amounts to a loss of $8.6 billion in wages per year. Furthermore, as mentioned before, it is estimated that American industries absorb billions in annual losses due to stress-related diseases.

The Stress Process

The stress process is very dynamic and involves, in part, three basic sequential steps: stress onset, stress reaction and stress effect.

I. Stress onset — Before stress of any degree can occur, a complex series of events and processes are usually initiated. The process is both complex and dynamic and involves internal and external events — conditions and situations — that affect the body and the mind.

Stress is a physiological response. In its physiological state, stress is not synonymous with worry, anxiety, depression or...
frustration. These conditions, for the most part, are potential precursors or triggers for the stress response. They are known as stressors. A stressor, therefore, is the cause, and stress is the physiological outcome or the result.

Basically, a stressor is capable of eliciting or triggering a somatic or physiological adaptation response. Although an infinite amount of such factors exists, stimuli of this variety can be placed into three broad but interrelated categories:

- **Physical stressors** — Events/conditions that have the potential to change the internal or external environments of the organism.
- **Rapid onset stressors** — Events/conditions that have the characteristic of being rapid, sudden and/or of high magnitude.
- **Sociopsychological stressors** — Events/conditions that have the potential to trigger bodily reaction as a result of the interaction individuals have with their environment.

Technical advances have eliminated most of the potential daily impact of physical stressors (e.g., extremes in heat, cold). However, we are regularly exposed to certain physical stressors. One such group is called pseudostressors, such as chemical substances (caffeine in coffee, cola and chocolate; theobromine in tea and nicotine in tobacco) which are capable of causing a nervous stress reaction through artificial stimulation.

Specifically, these stressors stimulate a major branch of the peripheral nervous system — the sympathetic nervous system — that activates the body during the adaptation response. These substances enter the body and mimic the effects of sympathetic nervous stimulation, yet one may never be directly aware of it. However, in terms of life-style intervention strategies, pseudostressors can be avoided.

Noise, another physical stressor, is a byproduct of our contemporary life-style. However, there are remarkable individual variations in the degree to which noise can act as a stressor. Also, not all sources of perceived noise trigger a somatic stress reaction. In fact, not all loud noises adversely affect our bodies. Research indicates that pitch is not as important as the transient nature of the noise in producing a demand for adaptation or the stress reaction in our bodies. Transient sounds seem to bother our bodies, whereas steady noise seems to dissolve perceptually from our environment and helps us relax physiologically.

Unlike noise, which is relatively modifiable, other physical stressors include injury, bodily trauma, illness and pain which, because they are internal conditions, are less modifiable. All these factors have the potential to place excessive demands on our bodies.

Exercise is another physical stressor, although usually a beneficial one. But strenuous exercise makes enormous demands on the body. Therefore, it is not unusual for the body to experience failure due to overexertion.

Rapid onset stressors are of the sudden acute variety that sometimes disappear as fast as they are experienced. For example, any time you hear an unexpected loud noise, experience a sudden bright flash or unusual movement or feel a sharp pain, you have experienced a rapid onset stressor. These stressors do not necessarily pose immediate threats to our overall health. We experience them very frequently, and since we cannot avoid them, all we can do is learn to condition our nervous reactivity to them.

Most of the stressors that lead to a stress reaction and, in turn, to a variety of psychological, physiological and behavioral problems are of a sociopsychological variety.

For example, crowding — the violation of personal space — is a major sociopsychological stressor. Nearly all higher animals are territorial by nature and they stake out and defend a certain degree of physical space. For people living in urban congested areas, for example, traffic jams, crowded elevators, and the like, often trigger a cognitive appraisal which can lead to the stress response.

Following the work of T.H. Holmes and R.H. Rahe,9 one of the most thoroughly researched sources of stress is the construct of life change. Its basic premise is that any change in our lives — good, (marriage, job promotion), or bad, (death in family, loss of job) will call the body’s mechanisms of adaptation into play, thereby releasing the stress response. Life change has the capacity, then, to increase our susceptibility to psychosomatic disease.

Interactions with other people constitute another source of stress, especially when we expect others to behave in a certain way. For example, you may have expectations of standards of cleanliness in your office. If your office mate violates your expectations, problems can arise. One option is to redefine your expectations of cleanliness. However, if you choose not to redefine the level of your expectations, you will be forced to experience — over time — chronic stress as your expectations are continually violated.

Most often, when conflict or disharmony exist between the individual and the working environment, for example, severe stress can occur. Again, violations of expectations are the major causal factors in such a scenario. Any change to external conditions that deviates from what we deem as correct, reasonable or expected, can trigger some source of stress. Job-related stress can result from such factors as conflict with co-workers or supervisors, job dissatisfaction, work overload or underload, lack of support, and time pressures.10

Closer to the psychological side on the sociopsychological continuum of stressors are internal pressures that arise from our desires, emotions and attitudes. Individuals who suffer from poor self-esteem, who are prone to anxiety and who suffer from emotional conflict, can be vulnerable...
II. Stress reaction — Stress is a physiological adaptation response resulting from the triggering or the onset of the stress process to which our bodies react. Specifically, psychogenic stress begins with the eliciting of the fight-or-flight response, which is the immediate physiological response to stress. As the name implies, this response allows us to either fight or flee, which gives us a survival advantage when we encounter demanding stressors in our environment.

The fight-or-flight response is essentially a preparatory response, which was more beneficial for prehistoric man than modern man. The former could randomly fight or flee his perceived threat. But for the latter, these options are, in many cases, unrealistic. However, as modern people, we still experience the fight-or-flight reaction in our day-to-day perceived threats but we usually fail to act on it in an overt manner, therefore, the physiological arousal that accompanies the reaction lingers (e.g., rapid heart rate, vasodilatation of arteries to the deep muscles, and vasoconstriction of arteries to the surface skin). These activities contribute to some of the more familiar symptoms of stress: rapid heartbeat; dry mouth; stomach pains, and so on.

Depending on the frequency, intensity and duration of the stress and the subsequent fight-or-flight reaction, major stress effects can then be initiated over time in several of our individual physiological systems (e.g., endocrine, muscle, gastrointestinal, cardiovascular).

III. Stress effect — In the last stage of the stress process — the stress effect stage — dysfunctions or disease are likely to occur in any one or a combination of three defined outcome areas: behavioral, physiological and psychological.

On a behavioral level, the effects of stress may include alcohol and drug abuse, absenteeism and even certain compulsive behaviors related to overeating, undereating and excessive exercising.

The physiological effects of stress could include, for example, coronary heart disease, heart attacks, hypertension, cancer (of which evidence is very recent), Raynaud’s syndrome, headache, ulcer, asthma and arthritis.

The psychological manifestations of stress can best be described as disruptive of normal routines — for example, agitation, hyper-reactivity and disturbed thinking processes. Emotionally, individuals under chronic stress may exhibit memory problems, confusion over details or excessive worry. On a more severe level, it is not uncommon for mental illness (e.g., depression and schizophrenia) to be associated with stress.

Stress Management

Given that some degree of stress is beneficial and that even if we wanted to eliminate stressors from our lives it would be virtually impossible, the logical step is to develop a personal plan to manage and cope with stress more effectively.

In the case of psychogenic stress, we should be clear that the impact of life’s adversities lie not in the stressors themselves, or in our social environment, but in our minds. All of our efforts, then, should be channeled into ways to manage stress by coping with it — not by avoiding it. The management of stress by avoidance is generally unproductive. One cannot avoid all stressors. Although no magic formula exists for any personalized stress management program based on a priori research, any stress management program should include the following basic areas: Assessment of stress effects, identification of stressors, and development of a stress skills acquisition program.

I. Stress assessment — Become informed about common symptoms of stress that occur on several levels, for example, flushing and sweating, irritability and agitation, worry and distractibility, and tremor and spasm.

II. Identification of stressors — Make some attempt to identify stressors that are (or were) external as well as internal. Such an identification should be organized around the three basic types of stressors mentioned before: physical, rapid onset and sociopsychological.

III. Stress skills acquisition program — Develop a personal plan to accomplish the following: a) replace or diminish the stress response; b) improve the stressful situation; and c) learn to deal more effectively with unchangeable stressors. This task is not insurmountable. Depending on the severity of ongoing stress-related events or situations, one may require professional help. For the most part, however, given the subjective and variable nature of the stress process, the onus is on the individual to develop a philosophy of life and a program tailored to personal needs in order to manage stress more effectively. The following points represent some suggestions in this regard.

Be aware of your limits. A primary step in stress management is to be aware of stress before it becomes overwhelming. You should learn to be aware of your personal limitations and keep track of your feelings so that you can avoid overextending yourself.

Assess your self-perception. Because it is your perception that accounts for so much of the psychogenic stress that is potentially harmful to your health, it is important that you review, at the onset, your self-perceptions. You should, for example, evaluate the following: Are your expectations of others and yourself realistic? Are your self-perceptions basically positive? Do you have an inflated self-image to compensate for possible deep-seated negative feelings?
Talk with someone close. By talking about your stressful situation to a supportive and close co-worker, friend, relative or spouse, you are apt to experience some benefits. For example, it can help to put the problem in perspective, thereby understanding it more realistically and, possibly, seeing it as surmountable. Talking with others may help to identify the source of the problem, thereby allowing you to take steps to remedy the impact of the stressor. You will likely experience a sense of relief for having voiced your feelings.

Clarify your most important goals. Because most people desire to accomplish several things in life, you should: a) rank the important things you need to do to reach your goals — in the short and long range — as well as the extent to which you may be willing to compromise on the satisfaction of these goals if the need arises; b) evaluate how satisfying accomplishing these goals will be for you; c) evaluate the trade-offs that are necessary to accomplish these goals; d) evaluate the realism of these goals; and e) evaluate if you have the resources to accomplish them.

Practice good time management. Try to organize your time by scheduling your activities on a daily, monthly, or even yearly basis as you feel comfortable doing. Such organization will allow you the maximum opportunity to achieve your stated goals and objectives. A degree of flexibility should be incorporated in scheduling your activities to account for the unexpected. Symptoms of a time management problem include wishing for more time and constantly working long hours.

Learn to be flexible. Don't be extremely adamant or inflexible about a position or issue, especially if it involves feelings that you do not hold deeply or are not too sure about.

Get sufficient sleep, diet, and exercise. In order to be on the offensive to effectively cope and resist both internal and external stressors, you should get sufficient sleep, follow a balanced diet and have a regular and, if possible, vigorous exercise program. For example, a well-rested body coupled with a balanced diet can build up your resources to fight off disease and minimize stress. A good exercise program that involves, if possible, such vigorous activities as bicycling, swimming, jogging, or brisk walking, at least three times a week, not only strengthens your cardiovascular system, but also allows you to relax and work off negative feelings.

Consciously relax. Known as the first line of defense against stress, relaxation is probably the most vital antistress strategy. It is a profound physiologic phenomenon during which our bodies "rezero" and move toward metabolic homeostasis. Essentially, relaxation helps to decrease oxygen consumption, carbon monoxide elimination, and slow the respiratory rate, all of which are important in stress management.

Conclusion
Stress and its potential effects represent perhaps the most serious life-threatening challenge for modern man. The paradox associated with the stress process is that although stress has the potential to be destructive to one's health, and is unavoidable to a degree, it is vitally necessary to life.

Given the above reality, understanding the whole stress process is a necessary prelude to developing a personalized and functional stress management program to cope more effectively with stress on a day-to-day basis.

In developing a personalized stress management program, individuals must be ready to become personally responsible for their health. Also, they should be mindful of the truth that they have the capacity to control the quality and quantity of their lives along the entire spectrum (interpersonal, psychological, physiological and social) of their activities.

Managing stress more effectively will, undoubtedly, allow for maximum utilization of the vast human potential.

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REFERENCES