

The Newsletter of THE AMERICAN INSTITUTE OF STRESS

Number 2, 1988

The Health Benefits of Being A Mother

A recently issued government report indicates that while overall cancer rates are declining, there has been a disturbing upward swing in breast cancer in middle-aged women. The reasons for this are not clear, although it has been established that women who have had children are less likely to develop breast cancer than those who have not. Also, the younger you are when you have your first child, the better your chances for escaping this problem. Pregnancy appears to lower concentrations of prolactin, a hormone which is known to cause breast tissue growth and contribute to malignant breast tumors in experimental animals. It has been noted that in the past few decades, more females have become career women and consequently, do not marry and become mothers, or do so when they are comparatively older. In addition, such individuals may be subjected to various forms of job stress due to frustration in advancement or obtaining parity with male workers having equivalent skills, training and experience. Emotional stress has been demonstrated to cause a depression in immune system defenses against cancer and a variety of viral-linked disorders. One study of women who had been married between the ages of 17 and

44 revealed that those who never had children were much more susceptible to sudden death due to heart disease. Possible explanations offered include an abnormal endocrine state which possibly contributed both to infertility and cardiac disease because of estrogen deficiency as well as the psychosocial stress associated with being barren. In any event, it appears that motherhood bestows certain health benefits, as well as more other obvious rewards.

The Health Effects Of Divorce

Most attempts to rate or quantify stress place death of a spouse or a loved one at the top of the list with loss of other important emotional relationships such as divorce, marital separation, and retirement next in line. Death of a spouse has been shown to result in a prompt and prolonged depression of immune system function possibly explaining why recently widowed individuals have 3-12 times higher death rates than married controls. Recent studies now confirm that marital separation is also associated with a significant impairment in immune system function. Women who had been separated one year or less had much greater depression of immune responses than matched married counterparts. Among the separated-divorced group, those with a greater attachment to their (ex) husband exhibited the highest levels of emotional depression and poor immune responses.

ALSO INCLUDED IN THIS ISSUE

The Health Effects of Unemployment on Women	2
Does Lowering Blood Pressure Feed the Fountain of Youth	2
TMJ — The New Stress Syndrome	3
Is the Brain or the Heart the Seat of Emotions?	3
Is Type A Behavior Necessarily Harmful	3
Stress and Blindness	4
The Smell of Stress	4
Does Sense of Control Dictate Health?	5
Stress and Type A Diabetes	5
Is Hypertension Transmissible by Marriage	5
Pessimism and Poor Immune System Function	6
Stress in Japan	6
How to De-stress Your Home Life	7
Job Stress, Sex and Women	7
Cancer and Depression—A Fatal Link	7

For further information on the original source of abstracts and other reprints available on similar subjects, please send a self-addressed stamped envelope to: Reprint Division, American Institute of Stress, 124 Park Avenue, Yonkers, NY 10703.

The Newsletter of THE AMERICAN INSTITUTE OF STRESS NEWSLETTER is published monthly by The American Institute of Stress. Subscription rates: \$35.00 annually. Copyright© 1987 by The American Institute of Stress. All rights reserved.

The Newsletter of
**THE AMERICAN INSTITUTE OF
 STRESS**

Paul J. Rosch, M.D., F.A.C.P.
 Editor-in-Chief

**Contributing Editors from The Board of Trustees of
 The American Institute of Stress**

Robert Ader, Ph.D., Rochester, NY
Herbert Benson, M.D., Boston, MA
Norman Cousins, Los Angeles, CA
Michael E. DeBakey, M.D., Houston, TX
Joel Elkes, M.D., Louisville, KY
John Laragh, M.D., New York, NY
James J. Lynch, Ph.D., Baltimore, MD
Kenneth R. Pelletier, Ph.D., M.D., Berkeley, CA
Ray H. Rosenman, M.D., Menlo Park, CA
Charles F. Stroebel, Ph.D., M.D., Hartford, CT
Alvin Toffler, New York, NY
Sue Thomas, RN, Ph.D., Baltimore, MD

The Health Effects of Unemployment in Women

Unemployment is a rapidly growing problem and job loss appears to be associated with significant emotional, behavioral and other health problems including increased mortality rates. Having a good job provides some purpose and direction in life, as well as regular daily activity, social support status, self respect, and financial compensation. Unemployment may cause severe stress by disrupting any or all of these positive attributes. Swedish workers studied two groups of individuals who had been continuously employed before losing their jobs. All received 90% of previous income for 14 months under the country's welfare program, so that economic deprivation was not a significant factor. One of the two groups, in addition to receiving the usual financial support, participated in social and other self-help programs designed to help them find new jobs, explore other options, or pursue other useful activities during the day. Immune system function was studied in this cohort as well as in a controlled group of matched individuals who were employed in stable jobs. In both of the unemployed groups, immune system function was found to be significantly impaired after nine months of unemployment when compared to the control group of stable workers. The psychosocial intervention program did not appear to confer any benefits in terms of significantly lessening this decline in immune system function. Further studies are underway to see if this effect persists over a

longer period of time or is associated with significantly worsened health patterns or increased incidence of malignancy.

"There are no false theories, and there are no true theories; there are only fertile theories and sterile ones." — Claude Bernard

Does Lowering Blood Pressure Feed the Fountain of Youth?

That was the question suggested by the title of a recent article describing ongoing animal experiments relating blood pressure to the aging process. High blood pressure seems to accelerate the rate at which blood vessels age. More importantly, the studies indicate that lowering the blood pressure will significantly slow this process in young animals who are genetically predisposed to chemically induced hypertension. In such animals blood vessels quickly take on the same structural features as vessels from aged controls. However, if the pressure is kept down by using drugs starting at infancy, the vessels retain their youthful characteristics almost throughout the entire life span. It is too early to say whether or not this suggests the desirability of lowering normal blood pressures in humans since while vascular aging may be retarded, there are other disturbing side effects that may accompany such treatment. However, as newer agents are developed, such objections may lessen. Early intervention in genetically susceptible individuals could have significantly beneficial effects.

*"Would you tell me, please, which way I ought to go from here? 'That depends a good deal on where you want to get to,' said the Cheshire Cat. 'I don't much care where,' said Alice. 'Then it doesn't much matter which way you go,' said the Cat. '—so long as I get **somewhere**,' Alice added as an explanation. 'Oh, you're sure to do that,' said the Cat, 'if only you walk long enough.'"* — Lewis Carroll

TMJ — The New Stress Syndrome

The movie "Jaws" and its successor were stressful to many movie audiences but so are those structures your teeth are connected to. Many individuals grind their teeth unconsciously in response to stress, especially when they sleep, giving rise to a host of disturbing symptoms including headache, neck pain, inability to open the mouth adequately, and other general symptoms like fatigue and weakness. These symptoms may be sufficiently debilitating to interfere seriously with eating or working. TMJ (temporomandibular joint) problems can arise from clenching a pencil or musical instrument tightly between the teeth, frequent gum chewing, smiling, direct trauma, or as a consequence of systemic disorders such as rheumatoid arthritis and overactivity of the thyroid. Such problems can often be significantly alleviated by a removable plastic splint placed over the teeth to prevent grinding or helping reprogram jaw muscles by physical therapy and exercises. Transcutaneous electrical stimulation, ultrasound therapy, and medications which reduce muscle spasm or relieve inflammation are also used. Some patients with long-term problems can benefit from meditation, biofeedback, behavioral modification, and psychotherapy. Many individuals unconsciously tense their jaw muscles when they are angry or under stress and have to be taught that they should not continually fight the world by "biting the bullet."

Is the Brain or the Heart The Seat of Emotions?

Conventional medicine teaches that the brain is the most likely site of origin of our feelings as well as thoughts. A host of small brain peptides have been discovered in the past few years such as the endorphins, which have profound effects on mood, behavior, and pain sensation. Traditionally, however, emotions such as love and anger have been linked with the heart as evidenced by common phrases we still use such as "broken-hearted," "heart of gold," "stout-hearted," and "faint of heart" in the belief that this organ is somehow associated with feelings of love, sorrow, anger, bravery, and fear. In recent years, we have come to appreciate that the heart is more than a physical pump and that it also secretes small peptide hormones that have a powerful influence on blood

pressure and salt restriction. Now, scientists have found that these same hormones are also produced in the brain. In addition, other specific sites in the lower brain stem manufacture adrenalin and other chemical messengers affecting heart action, indicating even more brain-heart links.

Is Type A Behavior Necessarily Harmful?

Not according to some recent studies. The Type A concept was formulated some 40 years ago when two cardiologists noted that the majority of their heart attack patients did not appear to suffer from the usual risk factors such as cigarette smoking, hypertension, and elevated cholesterol. What did seem to be a more common denominator was a certain type of behavioral and activity pattern characterized by impatience, time urgency, aggressiveness, competitiveness, and other "male" type characteristics. Such individuals, labeled Type A, were subsequently found to secrete greater amounts of hormones such as norepinephrine known to cause cardiac damage and lethal disturbances in heart rhythm. The Type A behavior pattern has been proven to be as significantly associated with heart attacks as any other controllable risk factor. Obviously not all Type A's have heart attacks, and many Type B's do, and individuals may have significant increases in one component of Type A behavior but not others. There has also been considerable controversy as to how Type A behavior can be most accurately and efficiently identified and measured. In the past decade, considerable interest has focused on attempting to dissect out those components of Type A behavior which are most likely to predict the development of coronary heart disease either in terms of attitude, behavior, or physical activity characteristics. Thus, it has been suggested that Type A's with a specific type of speech pattern are at particular risk, but the largest body of evidence points to hostility, cynicism, and anger as the real culprits. The first two are difficult to measure accurately compared with more refined techniques to rate both anger and the ability to express it. It now appears that individuals demonstrating a great deal of anger or hostility but who are unable to express it, literally "can't get things off their chest." Such Type A's appear to be far more likely to suffer a heart attack, hypertension or sudden death than those who are in control of their activities and able to vent their

(Continued on page 4)

(Continued from page 3)

Is Type A Behavior Necessarily Harmful?

feelings whenever they want. As a consequence, researchers now tend to distinguish between global Type A behavior and Type A coronary prone behavior. Of considerable interest has been a recent follow-up of the original study which established Type A behavior as a significant risk factor for coronary heart disease. Paradoxically, Type A's, who had suffered a heart attack, appeared to be at decreased risk for developing a recurrence than Type B's. Explanations include the observation that the risk factors for a second heart attack are quite different from those for an initial event since they are more closely related to the extent of damage following the first episode. Also, Type A's seem to have less anxiety than Type B's following a heart attack and their personalities and behaviors may change more. Other research suggests that being Type A may not necessarily be hazardous to your health if you are in control of your activities and can let off a little steam when the need arises.

"Where there is much desire to learn, there of necessity will be much arguing, much writing, many opinions — for opinion in good men is but knowledge in the making." — John Milton

Stress and Blindness

Sudden loss of vision is often due to a form of detached retina known as central serous chorioretinopathy that appears to be stress related. In a recent study of some 33 patients with this disorder, interviews revealed that over 90% had an extremely stressful experience prior to their blindness. A 32-year-old handyman developed eye trouble eight hours after his girlfriend announced that she was "going to run off and become a whore." A 48-year-old housewife immediately developed blindness in her right eye when she came home unexpectedly and found her husband in bed with his 27-year-old niece, and a college professor linked his sudden visual defect to a showdown with his departmental chairman over tenure. In some instances the cause-effect relationship may be more chronic, as in the case of a 35-year-old journalist

who had been imprisoned in a foreign country for one week. Shortly after his return home, relationships with his two girlfriends abruptly ended, and six weeks later a close relative underwent a serious operation, with loss of vision occurring two weeks after that. The patient described this ten weeks as the worst period in his life.

These patients were younger than those in whom retinal detachment is most apt to occur and did not have any evidence of underlying vascular disease which might have been a predisposing factor. However, they did tend to be perfectionistic and react explosively to stressful stimuli and 97% scored very high when evaluated for Type A personality. The researchers theorize that in these individuals, stressful events might cause abrupt surges in blood pressure forcing fluid to leak from the capillaries behind the retina. Accumulation of fluid could cause blisters to form on the retina, detaching it from the tissue beneath. Individuals under chronic stress might be particularly prone to this problem from repeated damage to the capillaries and support structures behind the retina. This seems to be supported by the observation that almost half of the people studied had a recurrence of their problem which also appeared to be related to stressful incidents of a lesser magnitude than that associated with their initial blindness.

The Smell of Stress

Most stressful responses occur as a consequence of visual threats suggesting imminent danger as in the "fight or flight" response. Auditory and tactile stimuli can also be stressful and new research suggests that stress can also be communicated by the sense of smell. When rats are stressed by electric shock, they produce an odor that is readily detected by other rats, causing them to react as if they also had been stressed. Thus they exhibit the same patterns of heightened activity and similarly demonstrate increased resistance to painful stimuli. The importance of a well-developed sense of smell is very evident in animals and is closely linked to sexual activity in bulls, dogs, pigs as well as rats who depend on the detection of odors to determine female receptivity for mating. Now it appears that such capabilities may also provide survival value by warning of impending danger and setting in motion appropriate adaptive responses despite the absence of other evidence of any threat.

Does Sense of Control Dictate Health?

It has become increasingly clear over the past decade that stress is associated with a variety of adverse health effects. These range from cardiovascular disorders, probably related to increased amounts of stress-related hormones like adrenalin and depression of immune system resistance to certain malignancies and infections. The problem is that it is difficult to define stress since it is different for each one of us. However, one thing that seems clear in all animal and human research is that the sense or feeling of being out of control is very distressful. A corollary of that would appear to be that being in control might minimize or negate the harmful effects of stress or even promote health. The psychologist, Alfred Adler, believed that a sense of mastery over one's fate was an important key to psychological health. A variety of reports seem to support this and suggest physical health benefits as well. One recent experiment involved elderly individuals living in convalescent homes who were given more control over their activities. Seemingly trivial decisions, such as letting them pick their own meals, determining how the furniture is arranged in the room, and when their phone would ring, not only increased alertness but lowered the mortality rate over a period of 18 months by 50% when compared to a matched group that had no say in such matters. Conversely, elderly individuals faced with feelings of frustration, helplessness, and hopelessness when forced to move from their homes in a deteriorating neighborhood to more attractive federally subsidized housing experienced significantly more hospitalizations, admission to nursing homes, strokes, and chest pain than a comparable group who did not move. Type A individuals have a greater need to be in control and are usually more competitive and easily angered which may explain a higher incidence of heart attacks. In the workplace, it has been noted that when managers have a greater degree of control, the workers under them feel less satisfied than when they have a greater degree of autonomy. Similar findings have been noted in teacher-student relationships. This may have important implications for the educational process. One psychologist noted that when there is a rigid agenda and strict discipline, students appear to take little pleasure in learning. While they may score better on tests, "the more a student feels control from outside, the less pleasure he feels from inside. He ends up being turned off to learning." The same appears to be true in sports where a coach's "winning is everything" attitude interferes with the players' enjoyment of the game or their desire to continue in the sport.

"Women are trying to show us they can do everything that men do. I do not contest it . . . the trouble is that men cannot do anything faintly approaching what women do." — Leo Tolstoy (whose wife handcopied *War and Peace* seven times).

Stress and Type A Diabetics

It has been well established that emotional stress can elevate the blood sugar in certain diabetics and increase medication requirements. Possible mechanisms include increased secretion of adrenalin or adrenal cortical steroids, both of which could produce such an effect. Since Type A behavior is characterized by such heightened physiologic responses to stressful stimuli, researchers studied the effects of playing a competitive video game in Type A and Type B children, two hours after lunch. Although heart rate and blood pressure rose in both groups, blood sugars rose in Type As and decreased in Type Bs after the video game challenge. To rule out the possibility that this was due to altered metabolic responses to the meal itself, blood sugars were measured before and after lunch without any intervening stressful stimulus. No differences were found between Type A and Type B children. In addition to these short-term observations, Type As also had higher average blood sugars.

Is Hypertension Transmissible by Marriage?

That might be one conclusion based on a recent Yale University School of Medicine study of 933 white couples. The researchers found that blood pressure levels tend to be similar in spouses, even after adjusting for age, shared dietary salt intake, exercise, smoking habits and obesity. In addition, other factors such as education, occupation income and socioeconomic factors were also taken into consideration. Thus, the concordance of blood pressure in spouses could not be explained in terms of conventional risk factors suggesting that some other environmental influence is operative. One suggestion is that communication between married individuals is a factor, especially with respect to expressing emotions and dealing with mutual problems that occur in families.

Pessimism and Poor Immune System Function

Certain types of pessimists may be particularly predisposed to depression, disease and even death when confronted with certain stressful life change events. That was the opinion expressed by Dr. Martin Seligman in an invited address delivered to the annual scientific session of the Society of Behavioral Medicine. Such individuals often have a pessimistic attitude that essentially perceives adverse events as being internal, stable and global. When bad things happen to them, their response is usually "It's me, it's going to last forever, and it's going to undermine everything I do." This pessimistic attitudinal style is strongly linked with depressive illness syndromes. Best known for his development of the learned helplessness model of depression, Dr. Seligman suggests that by examining an individual's attributional style, it is possible to determine not only whether there is high risk for developing depression but also the ability to cope with high stress occupations. He indicated that it was even possible to profitably bet on sporting events simply by studying the sports pages for quotes that might give a clue to leading athletes' attributional styles. His research appears to be supported by longitudinal studies of children and adults with pessimistic attributional styles who had a greater tendency to become depressed and remain so when compared with others with more optimistic attitudes.

To test his theory, Dr. Seligman looked at the 1982-1983 season for the Boston Celtics who had "a wonderful attributional style . . . like manic patients," the New Jersey Nets who "look like the upper quartile of depressed patients," and the Washington Bullets who scored somewhere in between. There was a very good correlation between how these teams performed the next season against the spread, following the stress of a loss. The Celtics beat the Las Vegas oddsmakers 68% of the time, the Bullets did in 49% of the time but the Nets made money for their backers only 39% of the time. With respect to mortality, attributional quotes of Baseball Hall of Fame inductees during the period from 1900-1950 were analyzed. There appeared to be a clear correlation between a player's statements concerning causality in winning or losing a game and later susceptibility to disease. For example, players like Lou Gherig who tended to blame themselves when things went wrong and credit others or good luck when successful, frequently died at a relatively young age.

With respect to attempts to correlate internal, stable global pessimistic attitudes with objective evidence of poor immune function, 53 such women who satisfied

these criteria were studied. When compared with controls, there was evidence of impaired immune system competency as assessed by an increase in suppressor to cell activity. In a separate presentation at the same meeting, another prominent researcher, Dr. Sandra Levy, provided additional support. She reported that a pessimistic attributional style was also associated with poor immune function as measured by natural killer cell activity and was a powerful predictor of early mortality in 13 melanoma patients.

"A scientist is in a sense a learned child. There is something of a scientist in every child. Others must outgrow it. Scientists can stay that way all their life."
— George Wald

Stress in Japan

Chief executives of at least 12 major Japanese companies died suddenly this year, more than three times as many comparable deaths as occurred in 1986. Furthermore, most were in their fifties and sixties in a country where the average male life expectancy is 75. Although the causes of death ranged widely from pneumonia to heart attacks, many Japanese feel strongly that the real cause was the stress that resulted from a 40% rise in the value of Japanese currency. This caused sales and profits to decline because of decreased exports. One psychiatry professor commented that in Japan, the extreme obsession with perfection puts unusual pressure on executives. His prior research also demonstrated that the incidence of heart attacks among managers was nearly four times higher during the oil crises of 1974 and 1979 as in the high growth period of 1966 to 1968. Top Japanese executives are often workaholics with little time for family and social life and even the latter activities are usually work related. Frequent business entertaining does not permit them to relax at home or watch their diets but instead encourages increased alcoholic and high-calorie food intake which may also contribute to the problem.

"The reasons for the success of these subjects in editing journals is clear. First, by preventing new ideas from appearing in print, they make it easier to keep up with the literature. Second, by requiring the experimenter to repeat his study dozens of times and re-write his paper hundreds of times, they enforce the consumption of materials and labor, thus stimulating the national economy. Third, if they can understand a paper, anyone can." — S.A. Rudin.

How to De-Stress Your Home Life

Job stress appears to be getting all the headlines, but some of those problems may have their roots in difficulties at home. Constant arguments with family members, financial difficulties, and stressful environmental conditions are common home-life stresses which spill over into professional and other activities. Measures which can be helpful in reducing stress at home include respecting the privacy and individuality of family members, establishing and adhering to definite rules to insure this, allowing for enough time as well as a place to relax or get adequate exercise, setting realistic goals for yourself and other family members, budgeting and promoting proper financial planning, reducing annoying sound levels and other environmental disturbances, joint efforts to promote neatness and order, and a sensible daily routine. Many problems stem from unilateral inappropriate demands and expectations from others in the household. These can often be minimized by trying to guide rather than forcing others to achieve realistic goals. A dictatorial attitude can backfire and result in losing the kind of leadership and control you are trying to achieve. Teenagers are especially rebellious when it comes to authority and the best results come from setting a good example in terms of lifestyle, temperament, and resilience in dealing with family disputes.

"Life consists of many little things, but to do them well is a big thing." —I.K. Wilson

Job Stress, Sex And Women

According to a recent USA Today front page story, more than 36 percent of women have been sexually harassed on their job. The article reported on a survey of 100 people in a variety of professions in Little Rock, Arkansas, by The Association for the Sexually Harassed. They suggest that the incidence is even higher in larger metropolitan areas. Support comes from the Equal Employment Opportunity Commission which has already received 45,000 reports of sexual and other harassments in the first

eight weeks or so of 1988, considering that only a fraction of incidents are actually reported. Two-thirds of employees don't even recognize the problem which may appear in the form of "sexual jokes, unwelcome physical contact or exposure to pornography, and unsolicited requests for dates and sexual favors." Many are reluctant to take any action for fear of losing their jobs. In this particular survey, most of the complainants were black and under 30. 11 percent were males.

"The laboratory is to some people what the lottery office is to others—organized hope."
—Henry Miller

Cancer and Depression — A Fatal Link

Almost 2000 years ago, Galen attributed cancer to a melancholy disposition. Modern research which has tracked a large sample of men for two decades appears to confirm that suspicion—at least in terms of dying from cancer. It has been well established that depression, bereavement and similar forms of stress can weaken immune system responses to cancer and a recent study utilizing MMPI scales that measure depression appears to confirm this relationship. A random sample of over 2000 white male employees, from a variety of occupations at Western Electric Company near Chicago, completed the MMPI as well as a physical examination in 1957-1958. Twenty years later, it was apparent that the death rate from cancer was significantly greater in those who had high initial depression scores, even when possible confounding factors such as cigarette smoking, alcohol consumption, family history of cancer, etc., had been accounted for. Another thirty-year study of medical students also found that those with a "distant, emotionally withdrawn approach to others or a poorly balanced mix of extreme emotions in relationships were more likely to develop cancer." No particular malignancy could be identified because the sample size did not permit statistically significant conclusions. One investigator concluded that "The finding that depression was associated more closely with cancer mortality than with cancer incidence suggests that it may promote, rather than initiate, the disease process."

Book Reviews • Meetings and Items of Interest

Book Reviews

Anxiety and Stress Disorders: Cognitive-Behavioral Assessment and Treatment. Michelson L. and Ascher L.M. eds. The Guilford Press, New York, 1987, 624 pp. \$39.50.

This is a very attractive volume which comprehensively but compactly presents the latest developments in theory, assessment, methodology, research and clinical applications of cognitive-behavioral strategies for anxiety and other stress-related disorders. It will appeal to clinicians and other health professionals and should prove invaluable to researchers because of the wide range of subject matter and extensive up-to-date bibliographies provided by the forty-four contributing authorities. Specific chapters in the clinical application section include childhood anxiety disorders, phobias, anxiety disorders in the elderly, in mental deficiency, post traumatic stress disorders, sexual dysfunction, migraine and tension headache, eating disorders and even anxiety associated with chemotherapy and other noxious medical procedures. One of the largest chapters is devoted to a review of behavioral treatment approaches to hypertension, which is particularly timely in view of the latest recommendations that non-pharmacologic measures should be explored before beginning drug therapy. Unfortunately the major contributions of Lynch and coworkers were omitted in this otherwise very comprehensive review of the subject. There is surprisingly little overlapping given the large number of authors and the editors are to be commended for the breadth and detail of the subject matter presented.

Social Stress and the Family. McCubbin, H.I., Sussman, M.B., and Patterson, J.M. The Haworth Press, Inc. New York, 1983, 231 pp. \$29.95 hardbound; \$14.95 softbound.

This is another volume in the Marriage and Family Review series and contains chapters dealing with bereavement, divorce and separation, family problem solving, as well as methodologic problems involved in studying family stress. The role of social support systems and the problems of "Black Families in White America" are also addressed. A short but useful concluding chapter is devoted to a listing of bibliographic sources that are available for further information including Indexes and Abstracts, bibliographies, encyclopedias, books and even sources for tests and measurements. Unfortunately, there is no subject or author index and some of the tables and illustrative material are difficult to read because they have had to be significantly reduced to fit the small (4-1/4 x 6-3/4) space available.

Stress and the Family. McCubbin, H.I., and Figley, C.R. Brunner/Mazel, New York, 1983. Vol. I Coping with Normative Transitions, 266 pp., \$22.50. Vol. II Coping with Catastrophe, 246 pp. \$22.50 (Vols. I and II \$40.00).

These two volumes had their origins in efforts to care for the families of American personnel trapped in Iran in 1980. Since then, research in family stress has increased dramatically as evidenced by the wide range of subjects addressed in these two offerings. Volume I includes problems of parenthood, sexuality, adolescents, dual careers, divorce, single parenting, stepparenting and other stressful transitional situations. A second section is devoted to environmental factors including work, prejudice, financial and other sources of social stress. Volume II deals with more catastrophic events such as abandonment, death, rape, natural disasters, war and captivity, etc. Illustrations and tables are of good quality and references are conveniently located alphabetically at the end of each volume. There is also a comprehensive subject index and author index for the entire series in both volumes. Highly recommended for family counselors and others interested in family stresses.

Meetings and Items of Interest

April 14-17, National Preventive Medicine - Atlanta, GA (202) 789-2928

April 17, Treating the Burnout Syndrome, New York, N.Y. (800) 843-9660.

April 27-30, Behavioral Medicine and the Aging Population, Boston, MA. (615) 974-5614.

May 14-21, Healing the Heart-Includes thorough discussion diagnosis and treatment of Type A Coronary Prone Behavior, Psychosocial Aspects of Cardiovascular Disease, (A. Friedman, J.J. Lynch and others). Boston, MA., Theoria Associates, (203) 456-6000.

May 21-27, Mind and Nature: World Conference for the Future of Human Civilization, Hanover, West Germany. (Sir John Eccles, Ilya Prigogine, R.D. Laing and others, (212) 744-8310 - (213) 854-0093.

May 26-30, The Association for Behavior Analysis-14th Annual Convention, Philadelphia, PA (616) 383-1629.

June 26-July 1, Neuroimmunomodulation, Copper Mountain, Co., Federation of American Societies for Experimental Biology, (301) 530-7093.

The Newsletter of
**THE AMERICAN INSTITUTE OF
STRESS**

124 Park Ave., Yonkers, New York 10703

Non-Profit Organization
U.S. Postage
PAID
Yonkers, NY
Permit No. 400