

The Newsletter of THE AMERICAN INSTITUTE OF STRESS

Number 8

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SIXTH INTERNATIONAL MONTREUX CONGRESS ON STRESS

February 21-23, 1994

Grand Excelsior Hotel, Montreux, Switzerland

Includes Sessions devoted to Occupational Stress, Stress And The Skin, Psychosocial Aspects of Coronary Heart Disease, Stress And Subtle Energies (electromagnetic fields, music, aromatherapy), Post Traumatic Stress Disorder, Psychoneuroimmunology, Stress and Pain, Workshop On Oriental Stress Reduction Approaches, etc. For additional information, contact Jo Ann Ogawa, The American Institute Of Stress, 124 Park Avenue, Yonkers, NY 10703. Phone (914) 963-1200, (800) 24-RELAX. Fax (914) 965-6267, (914) 377-7398.

Job Stress Now A "Global Epidemic"

A variety of surveys confirm that occupational pressures represent the leading source of stress for adult Americans, and that the problem has escalated progressively over the past decade. A report from the United Nations International Labor Organization now reveals that similar problems exist all over the globe to such an extent, that it is now considered to represent a "worldwide epidemic". No particular occupation appears exempt. "Waitresses in Sweden, teachers in Japan,

postal workers in America, bus drivers in Europe, and assembly line workers everywhere, are all showing increasing signs of job stress". It was previously widely believed that occupational stress was a problem affecting primarily white collar workers in industrialized countries, but particularly the United States. However, pressure to keep up with new technologies and machinery, little say or control over job duties, low wages for long hours, and some countries resulted in "millions of workers burned out, accident prone, or sick". It was previously reported that technostress is another major factor, particularly for workers who have to cope with the growing practice of electronically monitoring performance by computer. Job stress complaints have leaped from 5 percent of all occupational disease claims in 1980 to 15 percent 10 years later and are still rising.

The Associated Press Report-March 23, 1993

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

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Cops, Teachers And Other Most Stressful Jobs

According to a recent magazine article "cops and inner city school teachers rank as having the most stressful jobs". Three specialists were asked to rate both physical and psychological stress levels of various occupations. Their evaluations were based on the degree of danger, number of deadlines or quotas that had to be met, the degree of competitive pressures, and the amount of responsibility compared to the extent of control the individual had over work related duties. Police and inner city teachers made the top of the list because of high scores with respect to potential for personal danger, need to meet deadlines, and having lots of responsibility but little decision making capacity. Close behind, in the list of 20, were such diverse occupations as air traffic controllers, fire fighters, medical interns, assembly line workers, and waiters. Waiting on tables was viewed as stressful because it is a "classic high demand-low controlled job". Also making the top 20 list, were customer service representatives, security traders, newspaper editors, advertising executives, and public relations specialists. Curiously enough, middle managers, who are usually perceived as major victims of job stress, fared

no worse than sales personnel and lawyers. Bankers were at the bottom of the list, although those involved in savings and loans scandals, might not agree.

The Wall Street Journal-July 21, 1993

In order that people may be happy in their work, these three things are needed: They must be fit for it. They must not do too much of it. And they must have a sense of success in it.

John Ruskin

Cancer From Job Stress?

Emotional distress, particularly that accompanying bereavement and loss of important relationships has long been linked to the development and clinical course of certain cancers. Higher levels of job stress show a convincing correlation with an increased incidence of heart attacks and hypertension, and a new report suggests that cancer of the colon should be added to this list. Certain occupations have been associated in past with higher rates of specific malignancies, because of increased exposure to chemical or physical carcinogens. However, such mechanisms were not involved in this study.

Swedish researchers followed more than a thousand workers over a ten year period, documenting details concerning frequency and magnitude of life change events and stressful situations at work. Those individuals who were rated as being subjected to high levels of job stress were five times more likely to develop colorectal cancer than controls at the other end of the scale. Workers who were unemployed for more than 6 months also had twice as many malignant tumors as working controls, and being forced to move more than 120 miles because of job requirements increased risk three-fold. Marital separation and/or death of a spouse was associated with only a 50 percent rise. Prior studies had suggested that risk of colorectal cancer was increased in individuals who had a tendency to deny or suppress their anger, and that there was also a correlation with the magnitude of the frequency of antecedent life change events. The present report

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supports this as well as other studies linking stressful emotional states with a high likelihood of developing cancer. However, as the senior author noted, "the event itself is only the catalyst...it may not be the event that causes stress, but our way of thinking about and handling it that matters."

USA Today-August 30, 1993

Journal of Clinical Epidemiology-Vol.44, 1991

Dealing With Physician Stress And Burnout

As previously noted, stress has become a major problem for health care providers, particularly physicians. Alcoholism, substance abuse, suicide, depression, and divorce, are significantly higher compared to other occupational groups, and certain specialties appear particularly vulnerable. Physician stress seems to have intensified in the past decade, and promises to get worse due to increasing control over practice habits by fiscal intermediaries, regulatory agencies, and various hospital committees. Growing patient dissatisfaction, diminished public stature and respect, rising malpractice rates and suits, and the threat of further income cutbacks by the new administration are other contributing factors. One of the major difficulties is that many physicians will not admit that they have a problem, are reluctant to seek help because of some perceived associated stigma, or simply don't know where to turn.

One 35 year old internist-psychiatrist, who was a burnout victim herself, decided to do something about the growing problem of physician stress, and now directs The Center for Physician Development. This is a new off site program associated with Boston's Beth Israel Hospital. Its purposes are to:

- provide clinical support for individual physicians with stress related problems
- educate physicians about on stress management strategies and burnout prevention
- advise health care organizations and professional groups on ways to create less stressful work environments
- design and conduct national research studies to

identify sources of stress in medical practice and evaluate its impact on health care delivery.

The problems associated with physician stress are much greater than most people appreciate. Increasing numbers of doctors have opted for early retirement while still in their 50's, and recent surveys reveal that at least 4 out of 10 would not recommend medicine as a career choice for their children or anyone else. A 1990 membership study conducted by the American College of Physicians reported "a dramatic reduction over time" in the proportion of internists who were satisfied with their practices. Nearly 80 percent of older members (average age, 54.1 years) were very satisfied when they entered medicine, but only 25 percent felt that way in 1990, and has probably declined much more since then. As the Executive Director noted, "Just the fact that these kinds of studies are being done now makes quite a statement. In the past, it was just assumed that physicians were thrilled about their work."

Dr. John-Henry Pfifferling has been helping physicians and other health care providers to deal with job stress since 1979, at his Center for Professional Well-Being in Durham, North Carolina. He has witnessed a dramatic rise in requests for assistance from stressed-out physicians in recent years. Other organizations, such as the Harvard Community Health Plan, now provide their primary care physicians extensive training and orientation on ways to recognize and reduce stress in their lives. Many hospitals throughout the country are increasingly initiating stress reduction programs for house staff, recognizing that education and early intervention will prevent or minimize job stress problems down the line. Physician stress is probably going to increase most for solo practitioners, as they become buried in increasing amounts of paper work required by different HMO's, PPO's, and other organizations they must join to survive. These and other administrative responsibilities reduce income and increase dissatisfaction because they take time away from patient care, and the personal rewards that originally attracted them to the practice of medicine.

American Medical News-March 15, 1993



A Biopsychosocial Approach To Job Stress

Psychosocial occupational stressors originate in social structures and other processes in the workplace setting. They affect the human organism through psychological processes, and influence health through four types of closely interrelated mechanisms - emotional, cognitive, behavioral, and physiological. Health outcomes may be modified by situational factors such as social support, and individual considerations related to personality and coping skills. Social environment-stress-health interrelationships represent a dynamic system with many feedback loops. There is increasing evidence for a causal relationship between psychosocial stressors at work and morbidity and mortality in affected employees.

Research activities designed to explore these relationships and attempts to promote workers' health action should be system-oriented, interdisciplinary, intersectorial, participative, and focus not only on occupational disease prevention but workplace health promotion. In this regard, there appear to be seven main target areas:

- (1) Work load/workplace: increase decision latitude, avoid over/underload
- (2) Work schedule: avoid shift-work, allow flextime, job sharing, stable and predictable work hours

- (3) Work role: avoid role ambiguity and conflict; define and explain roles
- (4) Career/security: avoid uncertainty; promote career development
- (5) Interpersonal relations: provide opportunities for social interaction/support
- (6) Job content: avoid narrow, fragmented, unstimulating, short-cycle tasks with little intrinsic meaning
- (7) Participation and personal control: facilitate and promote

This approach has recently been formally adopted in the 1991 Swedish Work Environment Act.

Abstracted from: *Work, Stress And Health*

Lennart Levi - Karolinska Institute, Stockholm

Fifth International Montreux Congress on Stress

Hopelessness And Heart Attacks

There are numerous "risk factors" for coronary heart disease. Some are genetic, and others may be related to lifestyle habits such as smoking or not exercising. "Risk marker" would probably be a more accurate term, since most merely reflect a statistical association rather than the real cause of the problem. In addition, there are no apparent risk factors in a substantial proportion of heart attack victims, and it is also difficult to explain certain sociodemographic differences. Around the middle of the century, it was noted that two-thirds of the heart attacks in the United States occurred in men, while in Mexico and Southern Italy the split was even, although in Northern Italy the ratio was four men to one woman. Obviously, diet and environmental influences could not explain this disparity, which on further analysis this appeared to be related more to social, cultural and behavioral attitudes that might best come under the heading of "maleness". This was one of the observations that kindled the development of the Type A concept. Type A Coronary Prone Behavior is generally acknowledged to be a significant risk factor for coronary heart disease, and in recent years, attempts have been made

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to identify those components which might be most pathogenic, such as hostility, or anger, especially if suppressed. In addition, there has been increased interest in other characteristics of mind or mood that might be relevant.

In that regard, ischemic heart disease has been correlated with greater use of psychotropic drugs, job stress, as well as the stress of bereavement and/or loss of important emotional relationships. A recent report suggests that depression can also lead to a broken heart. Close to 3000 adults aged 45-77 years without pre-existing chronic disease completed an evaluation that included questions related specifically to feelings of hopelessness, discouragement and depression. They were followed for an average of 12.4 years, during which there were 189 deaths due to ischemic heart disease and 205 hospital admissions for non-fatal disturbances. Eleven per cent of the participants were classified as having a depressed affect, an equal number were judged as being in the moderately hopeless category, and 3% suffered from feelings of severe hopelessness. At the end of follow-up, all 3 of these groups had significantly higher death rates from heart disease compared to controls without such symptoms. Those in the severe hopelessness category had coronary mortality rates 4 times greater than normal controls.

Other factors that might have influenced results such as sex, age, smoking, alcohol consumption, hypertension etc., were taken into consideration. In individuals who were in the depressed and/or hopeless group, cigarette smoking significantly further increased risk for developing and dying from heart disease. Prior studies have also shown that vascular disease progresses more rapidly in depressed individuals who smoked, than in non depressed smokers. The reasons for this are not clear, although the researchers suggest that prolonged depression and hopelessness may be associated with biochemical changes that promote blood clots and atherosclerosis.

Science News-March 28, 1992, July 31, 1993

Lancet-September 4, 1993

A merry heart doeth good like a medicine.

Proverbs Chapter 17, Verse 22

Is Letting Off Steam Good For Men But Bad For Women?

That would seem to be the conclusion from research reported at a recent meeting of the American Psychological Association. One study of over 125 adults found that when men were able to outwardly express their hostile feelings, blood pressures tended to go down, especially if they were on the high side to begin with. However, just the opposite tendency was found in women. Those who held their anger in during stressful situations had a much more rapid return of blood pressure to normal than those who vented their feelings. Another study also found that holding in anger under stress caused an increase blood pressure in men but not women. The reason for these findings is not clear, although it's obvious that assertive behavior which would be perfectly appropriate or even admirable in males under certain circumstances, would represent unacceptable behavior for females, and certainly not considered very lady like.

Gannett News Service-August 29, 1993

Stress, Aging, And Free Radicals

In his later years, Selye defined stress as "the rate of wear and tear on the body", which also happens to be a pretty good description of biologic aging. He was intrigued with the numerous links between his General Adaptation Syndrome and aging. When his experimental animals were subjected to chronic stress, they developed accelerated atherosclerosis, gray hair, wrinkled skin, cataracts, and microscopic pigment, degenerative and atrophic hallmarks of aging, and died much sooner than their litter mates.

Increased free radical activity appears to accelerate almost all the signs of aging, including premature gray hair, wrinkled skin, cataracts and atherosclerosis. These effects are retarded by

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antioxidants which scavenge the body for free radicals and inactivate them. This may explain the cardioprotective and anti-aging effects of antioxidant vitamins C, E and beta carotene, minerals like selenium, and monounsaturated fats contained in olive and peanut oils. Conversely, a respected Finnish study recently found high serum iron and ferritin levels second only to cigarette smoking as a risk factor for heart attacks, since iron and smoking increase antioxidant requirements. In addition, chronic administration of iron promotes the characteristic changes of advanced age, and this can be prevented by pretreatment with Vitamin E. Similarly, Vitamin E reduces free radical damage to the heart and lungs resulting from exercised-induced oxidative stress. It is suggested that stress may accelerate aging because it increases or facilitates free radical effects in various ways. Some of these may include influences on antioxidant vitamins and melatonin and other endogenous free radical scavengers.

Abstracted from: *Stress And Free Radicals: Clinical Implications For Arteriosclerosis, Malignancy, Cataracts, Gray Hair, Ulcers And AIDS*

Paul J. Rosch - The American Institute of Stress, Yonkers
Fifth International Montreux Congress on Stress

“Emotional Distress Due To Job Loss Worth Millions”

As previously noted, Job Stress claims and awards, seem to have gotten out of hand in California. Its Court of Appeals recently upheld a 5.1 million dollar damage award, to a former employee of a construction company who claimed he had been unfairly pushed out of his job. Part of the reimbursement was “2 million dollars for emotional distress”. The 56 year old construction manager whose salary was 104 thousand dollars a year, walked off a major project because one of the customers was “abrasive and abusive”. He claimed that on his return, the company assigned him to minor projects, whereas younger colleagues received more choice assignments, and he was insulted because he did not get a raise or Christmas

bonus. As a consequence, he quit the job, checked himself into a psychiatric hospital, and filed a lawsuit. Although it upheld the award, the court complained that this area of the law was out of control and that ultimately “business enterprises will flee the state”. However, it had no choice but to affirm the verdict because it complied with existing governing standards that require “almost complete deference to jury decisions, no matter how outrageous or absurd”.

This case is hardly unique. The average wrongful-termination jury award in California is 1.3 million dollars, an amount that has almost tripled over the past three years. In at least three such cases, jury awards exceeded 15 million dollars, including one that resulted in a 45 million dollar verdict. Nor is this problem limited to California. A Texas jury returned a 124 million dollar verdict against one corporation for firing an employee who earned 93 thousand dollars annually, an amount almost half that of the company’s revenue for the previous year. A Dallas jury awarded a worker accused of stealing a telephone from his employer \$15.5 million dollars. In Florida, 25 million dollar and 15.2 million dollar verdicts have been returned to ousted employees for wrongful termination.

Part of the problem is that it is not clear as to who has authority to change the current situation. In California, legislative relief could take years. Many feel that since it was the courts that initially created the “emotional distress and punitive damage standards that are being exploited”, for wrongful termination, that this should be their responsibility. In 1991, the Supreme Court of the United States emphasized that state courts have a special constitutional obligation to supervise carefully the imposition of such punitive damages, and in a recent case, reiterated the Constitution’s ban on uncontrolled juries and unreasonable verdicts. Although it declined to overturn the punitive award in that particular case, both concurring and dissenting justices agreed on this, with one stating that “When a punitive damages award reflects bias, passion, or prejudice on the part of the jury....the Constitution has been violated.” Stay tuned.

The Wall Street Journal-July 28, 1993

More On Stress, Aging, And Melatonin

Although all tissues in the body, and indeed, every cell requires oxygen to survive, too much oxygen causes damage. Metals and other substances are preserved as long as they are protected from exposure to oxygen which causes rust. Plants and animals have developed complex systems to prevent oxidative deterioration by antioxidants which prevent oxidative injuries. However, these capabilities progressively decline as we grow older. All of the degenerative disorders seen in the elderly are due to oxidative damage. Aging is essentially the result of oxidative damage that has accumulated during our life.

Oxidative reactions increase during stress, and are a regular result of normal metabolic activities such as eating and physical exertion. When laboratory animals have their caloric intake sharply restricted, they live longer. In a recent experiment, it was shown that when flies were housed in quarters that allowed them only enough room to walk, they lived twice as long as those who were given room to fly. Researchers were able to correlate this added life expectancy with a corresponding lesser degree of oxidation in their tissues. To demonstrate the significance of this finding, it was shown in another experiment that flies who were subjected to periods of exposure to sublethal oxygen levels lived longer than those breathing regular air, presumably because they suffered less oxidative damage.

The most powerful oxidants are the so-called free radicals. These are molecules that contain an unpaired electron in the outer shell, and the OH, or hydroxyl radical, appears to be one of the most damaging. As Dr. Russel Reiter reported at our Fifth Montreux Congress, melatonin is one of the most powerful free radical scavengers the body possesses. Melatonin is a hormone secreted by the pineal gland in the brain, but only during darkness. Scientists now suspect that melatonin probably played an important role in the evolution of life by providing protection for various species from dangerous oxygen rich environments. Melatonin is somewhat unique, since it crosses all cell barriers. It is one of the most

powerful scavengers and inactivators of the damaging hydroxyl free radical, and theoretically could provide significant benefits with respect to preventing Parkinson's and Alzheimer's Disease in susceptible individuals. Although not yet available in the U.S., melatonin capsules may also have therapeutic potential for these and other degenerative disorders resulting from free radical damage.

Science News-August 14, 1993

The Exploding Head Syndrome And Stress

There are various sleep-onset disturbances, and one of the most dramatic is known as the "exploding head syndrome". Afflicted individuals report that they are apt to hear loud explosive like noises as they are trying to fall asleep, often accompanied by bursts and flashes of light. Others describe associated breathing difficulties, chest or stomach distress, or electric feelings that travel up from the stomach to the head followed by a violent explosion. Attacks tend to occur during the relaxed period as sleep beings, and result in awakening with a sense of anxiety and palpitations. The condition is described as "fairly common", although it is rarely referred to by patients or physicians during the medical history. The cause of exploding head syndrome is unknown. It is most apt to occur in older people, and stress appears to be an important factor. Some patients appear to have associated hearing loss and dizziness, suggesting some disturbance in the inner ear. Similar complaints have been described in others with implantable cardioverter-defibrillator devices, who experience or imagine nocturnal sensations of cardioversion. These may be accompanied by a jerking sensation or a feeling of chest soreness, even though there is no evidence that the device has been activated. In such instances, it is believed that this is also due to the stress of adjusting to the presence of the implantable device, and if sufficiently troublesome, may require psychiatric intervention.

*The New England Journal of Medicine
May 27, 1993*

Book Reviews • Meetings and Items of Interest

Book Review

Post Traumatic Stress Disorder: Etiology, Phenomenology, And Treatment. Wolf, M.E., and Mosnaim A.D., eds. American Psychiatric Press, Washington, 1990. 270 pages, \$39.50

This book is an extension of a symposium held at the annual meeting of the American Psychiatric Association, with updated supplements from additional authors to provide a more balanced and up to date presentation. It is divided into three sections, the first of which contains chapters devoted to the etiology of PTSD, a subject of considerable controversy. It is not clear whether certain personalities are particularly vulnerable because of prior experiences, mental state at the time of trauma, the existing psychosocial milieu, the nature of the stressor, deficient coping skills, dissociative mechanisms, etc. A particularly interesting chapter is devoted to the latter topic, and also discusses the use of hypnosis in such situations. Disassociative processes are perhaps best illustrated by the very different personalities that can co-exist in patients with multiple personality disorder. They are more commonly characterized by an alternative state of consciousness in which events that would ordinarily be connected become separated from one other. One example of this might be day dreaming, or the development of a fugue state. Hypnosis may also be viewed as a controlled and structured type of disassociation, and properly employed, it can provide effective therapeutic benefits. In an interesting analogy it is suggested that attempting to uncover or unravel the problems of disassociative disorder is analogous to looking for files in different directories of a DOS type computer system. Generally speaking, if you are in one directory and are searching for a file which is in another, the computer will say that no such file is available. It is now necessary to return to the root directory and go into each of the other directories to find what you are looking for. The situation might be similar when PTSD patients reexperience traumatic events, since they may now appear to be the only memory available, and there is no access to others that might help to replace this or have restorative

properties. However, hypnosis and/or psychotherapy may be viewed as having the capability of writing a DOS "PATH" command, that allows access to any other files, even if located in different directories or even subdirectories. Another chapter deals with "resilience", and focuses on the coping characteristics of individuals subjected to severe trauma but do not develop PTSD. Other presentations are devoted to the nature of frequent pain complaints in PTSD, the problems of PTSD in civilian life, and how to evaluate the significance of possible biological markers and neuroendocrine changes in PTSD. The third section devoted to treatment deals with various psychotherapy approaches, as well as the use of tricyclic anti-depressants, monoamine oxidase inhibitors, lithium, and carbamazepine. The final chapter addresses the increasingly important legal aspects of PTSD, both with respect to its appropriateness as a diagnosis to obtain appropriate compensation, as well as its use and abuse as a legitimate defense in court cases. Although this volume first appeared a few years ago, it is comprehensive, up to date, and includes a variety of important issues dealing with PTSD that not apt to be found in other publications dealing with this subject, particularly, with respect to Workers' Compensation and tort law implications.

Meetings and Items of Interest

October 2-4 Psycho-oncology V: Psychosocial Factors In Cancer -Risk and Survival, Rockefeller Research Laboratory Auditorium, Memorial Sloan-Kettering Cancer Center, New York, NY (212) 639-6754

October 6-10 American Association of Electrodiagnostic Medicine, New Orleans, LA (507) 288-0100 or (507) 288-1225

October 21-24 Energy Medicine and Body/Mind/Spirit Integration, A National Association of Holistic Healing Conference, San Diego, CA (804) 422-9033

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