

The Effect of Stress/Burnout on Health

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Burnout is a state of emotional and physical exhaustion caused by excessive and prolonged stress. It can occur when

you feel overwhelmed and unable to meet constant demands. As the stress continues, you begin to lose the interest or motivation that led you to take on a certain role in the first place.

A 1992 United Nations report labeled job stress "the 20th century disease." New technologies - cells, palms, e-mail, Blackberries — allow us to be reachable 24 / 7, with no time to relax. Now it has become also the 21st century disease. The World Health Organization says job stress has become a "worldwide epidemic." Expedia.com conducted vacation survey suggests Americans return more than \$21 billion in unused vacation hours / year.

The cost of stress and burnout

Stress and burnout bear a cost to society as well as the individual. Job stress-induced illness is estimated to cost US businesses \$150 billion a year. Australian Financial Review Work Place reported on 27-June-2007 three factors of work place financial drain from stress/burnout:

1. Absenteeism - total cost of workers' compensation claims for stress-related conditions is more than \$200 million every year.
2. Presenteeism – the cost of employees who are at work but not contributing fully because of an illness or an injury is \$25.7 billion in the financial year 2005-06.
3. High rates of job turnover – the cost of training new workers.

A meta-analytic examination of sleep loss and performance in resident physicians and non-physicians showed that sleep loss of less than 30 hours reduced physicians' overall performance by nearly 1 standard deviation and clinical performance by more than 1.5 standard deviations. It concluded that the weekly hours and continuous

wakefulness permitted under the current national minimum standards for medical residents (the 80-hour work) may not completely guard against the negative effect of sleep loss on cognitive and clinical performance. (Sleep. 2005 Nov 1;28[11]:1392-402)

The cost of stress and burn out for individuals include job loss and financial strain, decreased life span, and other stress related illnesses such as addiction, obesity, heart attacks, stroke and cancer.

The causes and symptoms of stress and burnout

Being trapped for economic reasons by an abusive job can create a lot of stress. Such jobs can be characterized by poor boss leadership, time pressures, unrealistic expectations, bullying managers, lack of respect or mindless boredom.

Service professionals such as physicians, dentists, nurses, police, teachers, social workers and those who spend their lives attending to the needs of others (especially those who have frequent contact with the tragic side of human experience) are at risk. Type A personalities with perfectionist traits tend to increase the risk for burnout.

The early warning signs of burnout include chronic fatigue, anger at those making demands, self-criticism for putting up with the demands, cynicism, negativity, irritability, a sense of being besieged, exploding easily, frequent headaches, gastrointestinal disturbances, weight loss or gain, sleeplessness, depression, shortness of breath, suspiciousness, feelings of helplessness and increased degrees of risk taking.

Stress:

1. Characterized by over engagement
2. Emotions are over-reactive
3. Produces urgency and hyperactivity
4. Loss of energy
5. Leads to anxiety disorders
6. Primary damage is physical
7. May kill you prematurely

Burn out:

1. Characterized by disengagement
2. Emotions are blunted
3. Produces helplessness and hopelessness

4. Loss of motivation, ideals, hope
5. Leads to detachment and depression
6. Primary damage is emotional
7. May make life seem not worth living and kill you prematurely

Stress and burnout damage to the brain

Imaging studies have shown abnormal activity in the reticular formation area in people with chronic fatigue syndrome. The reticular formation is the core of the brainstem running through the mid-brain, pons and medulla that is involved in awaking / sleeping, and lying down. Circadian rhythms also play a part in the reticular activating system which is crucial for maintaining a state of consciousness. The ascending reticular activating system connects to areas in the thalamus, hypothalamus and cortex. The descending reticular activating system connects to the cerebellum and sensory nerves. Parts of brain damaged by stress include the hypothalamus, hippocampus, amygdala and the prefrontal cortex.

Stress damages to the brain will cause problems of:

- Planning, execution, motivation, memory
- Extinction of fear response
- Emotional response
- Misreading of social cues (inability to read facial expressions)
- Encoding of short term memory
- Drive (satiation, motivation)
- Misinterpretation of body sensations (abnormal pain threshold)

(Burnout can be professionally measured by the Maslach Burnout Inventory (MBI) created by Christina Maslach and Susan E. Jackson. The test is available free on the internet.)

Prevention

The general principle of burnout prevention is to promote physical, emotional, psychological and spiritual well-being. Things you can do to help yourself are:

- Clarify your job description
- Request a transfer
- Ask for new duties
- Take time off
- Educate yourself
- Join a support group
- Know your limits
- Accept your feelings
- Confide in others

- Nurture your closest relationships - your partner, children, friends
- Develop casual social relationships, on and off site, with people at your workplace
- Connect with a cause or a community group that is personally meaningful to you
- Practice healthy communication

Treatment of burnout

- Change in job, hours, management
- Vacation
- Cognitive behavioral therapy
- Assertiveness training
- Drugs to protect brain – Rx symptoms
- CAM treatments – acupuncture, qigong, tai chi
- Music therapy
- Diet, exercise, healthy life style
- Stress reduction training

Prognosis

Bad prognostic indicators include:

- A workplace may be unwilling to make changes to help with burnout. There may be constant pressure to do more with less.
- Many companies are moving to cheaper labor markets and canceling worker benefits.
- The globalization of the economy means globalization of stress.
- The slow economy increases financial stress.

Prognosis for the individual:

- Of workers who burn out, some will return to previous jobs; others will never be able to return to former jobs or income levels.
- All workers who burn out will need training in stress management and other steps to improve health.
- The process of transformation may be painful if not properly guided.

On the positive side, there is life after burnout. Many people will have happy productive lives even if they are in different fields. ☪

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