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# DIABOLIC EFFECTS OF STRESS ON PHYSICAL AND MENTAL HEALTH

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#### Abstract

Modern era is an era of competition. Everyone's life is full of hustles, deadlines, frustrations, expectations and demands. All these things are making life stressful which disturbs our psychology, affects our social life negatively and damages our physical and mental health also. Stress epidemic seems to be spread all over the human population on Earth. A lot of studies indicate the adverse effects of stress on physical and mental health. Stress and mental health are associated with each other and related to life quality which is depreciated if an individual discern stress or dearth's mental health. Present paper is an attempt to highlight the importance of understanding and accepting stress just like any other disease. Approaches and techniques through which stress can be managed and the adverse effects of stress on physical and mental health can be suppressed are also featured in the present paper.

#### Introduction

We are living in a world of competition, to cope up that everyone's life is full of hustles, deadlines, expectations, frustrations and demands. In order to fulfill these assumptions of competitive time, everyone is under stress. Stress is an ongoing dilemma that occurs in each and everyone's life. Due to emotional, mental, physical and social problems that occur in people's daily lives massive amounts of stress can arise, which disturbs our psychology, affects our social life negatively and damage our physical and mental which leads to stress related diseases.

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Therefore, it's the need of time to think over it and find out the ways by which negative effect of stress on mental health can be reduced.

#### **Different kinds of stress**

Physical Stress - Intense exertion, manual labor, lack of sleep.

Emotional Stress - Anger, Guilt, loneliness, sadness, fear.

Traumatic Stress – Injuries or burns, surgery, illness, infections, extreme temperatures.

Acute Stress- It comes from demands and pressure of recent past and anticipated demands and pressure of the near future.

Chronic Stress- If acute stress is not resolved and begins to increase or lasts for long period of time, it becomes chronic stress. This stress is constant and does not go away.

Mental Stress- perfectionism, worry, anxiety, long work hours.

Nutritional stress- food allergies, vitamin and mineral deficiency

Psycho-spiritual- troubled relationships, financial or career pressures, challenges with life goals, spiritual alignment and general state of happiness.

Fustress- A positive form of stress having a beneficial effect on health, motivation, performance and emotional well being. It is indicted by hope and active engagement. Fustress has significantly positive correlation with life satisfaction and hope.

Distress- An aversive state in which a person shows maladaptive behaviors

Episodic Stress- It occurs when someone takes on too many tasks, become overwhelmed by all the demands with an inability to meet those demands.

## SIGNS OF STRESS

## Physical and Mental Signs of Short-term Stress

Often occurring in quick 'bursts' in reaction to something in environment, short-term stress can affect the body in many ways. Some examples include:

- Making heartbeat and breath faster
- Making sweat more
- Leaving with cold hands, feet, or skin
- Making the person feel sick to stomach or giving 'butterflies'
- Tightening muscles or making you feel tense

- Leaving mouth dry
- Making you have to go to the bathroom frequently
- Increasing muscle spasms, headaches, fatigue, and shortness of breath

While this burst of energy may help in physical situations where body needs to react quickly, it can have bad effects on mind and performance if there is no outlet or reason for stress. These effects may include:

- Interfering with judgment and causing to make bad decisions.
- Making you see difficult situations as threatening.
- Reducing enjoyment and making feel bad.
- Making it difficult to concentrate or to deal with distraction.
- Leaving the person anxious, frustrated or mad.

• Feel rejected, unable to laugh, afraid of free time, unable to work, and not willing to discuss problems with others.

## Physical and Mental Signs of Long-term Stress

Long-term stress or stress that is occurring over long periods of time can have an even greater effect on body and mind. Long-term stress can affect body by:

- Changing appetite (eat either less or more).
- Changing sleep habits (either to sleep too much or not letting enough sleep).
- Encouraging 'nervous' behavior such as twitching, fiddling, talking too much, nail biting, teeth grinding, pacing, and other repetitive habits.

Causing the person to catch colds or the flu more often and causing other illnesses such

as asthma, headaches, stomach problems, skin problems, and other aches and pains.

- Affecting your life and performance.
- Feel constantly tired and worn out.

Long-term stress can also have serious effects on mental health and behavior. Under stress for long periods of time, may find to have difficulty in thinking clearly, dealing with problems, or even handling day-to-day situations as simple as shaving, picking up clothes or arriving somewhere on time. Some mental signs of long-term stress include:

• Worrying and feeling anxious (which can sometimes lead to anxiety disorder and panic attacks).

• Feeling out of control, overwhelmed, confused, and/or unable to make decisions.

• Experiencing mood changes such as depression, frustration, anger, helplessness, irritability, defensiveness, irrationality, overreaction, or impatience and restlessness.

- Increasing dependence on food, cigarettes, alcohol, or drugs.
- Neglecting important things in life such as work, school, and even personal appearance.

• Developing irrational fears of things such as physical illnesses, natural disasters like thunderstorms and earthquakes, and even being terrified of ordinary situations like heights or small spaces.

While occasionally experiencing one or two of the above symptoms may not be cause for concern (everyone has a few nervous habits and difficulties in their lives!), having a number of these symptoms may mean that the person is under more stress than anyone think. But realizing under stress is the first step in learning to deal with stress.

# SYMPTOMS OF STRESS

Emotional symptoms of stress include

- Becoming easily agitated, frustrated and moody.
- Feeling overwhelmed, like you are losing control or need to take control.
- Having difficulty in relaxing and quieting mind.
- Feeling bad about yourself (low self esteem), lonely, worthless and depressed.
- Avoiding others.

Physical symptoms of stress include

- Low energy
- Headaches
- Upset stomach including diarrhea, constipation, and nausea.
- Aches, pains, tense muscles.
- Chest pain and rapid heartbeat.
- Insomnia.
- Frequent colds and infections.
- Loss of sexual desire and ability.
- Nervousness and shaking, ringing in the ear, cold or sweaty hands and feet.
- Dry mouth and difficulty swallowing.

• Clenched jaw and grinding teeth.

Cognitive symptoms of stress include

- Constant worrying.
- Racing thoughts.
- Forgetfulness and disorganization.
- Inability to focus.
- Poor judgment.
- Being pessimistic or seeing only the negative side.

Behavioral symptoms of stress include

- Changes in appetite.
- Procrastinating and avoiding responsibilities.
- Increased use of alcohol, drugs, and cigarettes.
- Exhibiting more nervous behaviors such as nail biting, fidgeting, pacing.

A little stress every now and then is not something to be concerned about. Ongoing, chronic stress however, can cause or exacerbate many serious health problems, including

- Mental health problems such as depression, anxiety and personality disorders.
- Cardiovascular disease including heart disease, high blood pressure and diabetes abnormal heart rhythms, heart attacks, stroke.
- Obesity and other eating disorders.
- Menstrual problems.
- Sexual dysfunction such as impotence and premature ejaculation in men and loss of sexual desire in both men and women.
- Skin and hair problems such as acne, psoriasis, eczema and permanent hair loss.
- Gastrointestinal problems such as gastritis, ulcerative colitis, irritable colon.
- Accelerated aging and premature death.

## STRESS MANAGEMENT

**Identify the sources of stress in life**- Stress management starts with identifying the sources of stress in life. This is not as straight forward as it sounds. While it's easy to identify the

major stressors such as changing jobs, moving or going through divorce, pinpointing the sources of chronic stress can be more complicated. It's all too easy to overlook how thoughts, feelings, behaviors contribute to everyday stress levels. To identify the true sources, look closely at the habits, attitude and excuses.

**Practice the 4 A's of stress management**-While stress is an automatic response from the nervous system, some stressors arise at predictable times. When deciding which option to choose in any given scenario, it's helpful to think of four A's: Avoid, alter, adapt and accept.

Avoid- Learn how to say NO. Avoid people who stress you out. Take control of your environment. Pare down the to-do list.

Alter- Express the feelings instead of bottling them up. Be willing to compromise. Create a balanced schedule.

Adapt- Reframe problems. Adjust the standards. Practice gratitude. Look at the big picture.

Accept- Don't try to control the uncontrollable. Look for the upside. Learn to forgive. Share feelings.

**Get moving-** When stressed, the last thing to feel like doing is getting up and exercising. But physical activity is a huge stress reliever and exercise releases endorphins that make the person to feel good, and it can also serve as a valuable distraction from daily worries

**Biofeedback**: It is a procedure to monitor and minimize the physiological symptoms of stress by providing feedback about current physiological activity and is often accompanied by relaxation training. Some of the physiological functions that can be controlled include brainwaves, muscle tone, skin conductance, heart rate and pain perception. Biofeedback training involves three stages: developing an awareness of the particular physiological response; learning methods of controlling those physiological responses in calm conditions; and finally transferring that control into the everyday life situations. Biofeedback has been reported very effective in the treatment and management of stress and stress related disorders in so many studies (Datey, 1980; Nestoriuc and Martin, 2007; Nestoriuc, Martin, Rief, and Andrasik, 2008: Lemaire, Wallace, Lewin, Grood, and Schaefer, 2011).

**Time management**: Time management is one of the key skills required to get success in this fast moving world. It is a method of helping people learns how to make best possible use of their time to increase their efficiency, effectiveness, and productivity. It incorporates a wide range of activities including planning, setting realistic goals, organizing, prioritizing, and finally analyzing. This technique has been found to be very effective in reducing job stress (Hosseini, Nourbakhsh, and Sepasi, 2013; Zaidi, 2015) and academic stress in students (Macan, Shahani, Dipboye, and Phillips, 1990).

**Meditation:** Meditation can be a wonderful technique to counteract the effects of stress. It affects the body in almost the opposite ways that stress does. It helps the body to repair the stress caused damages itself. Basically, it is a method of sitting comfortably in a silent place, concentrating on the breathing, and then bringing mind's attention to the present life events without worrying about the past and future events. It refreshes both the mind and the body and helps to regain the lost strength and positivity. The main objectives of this technique is to develop compassion, love, patience, generosity, forgiveness and more farreaching goals such as effortless sustained single-pointed concentration, singlepointed analysis, and an indestructible sense of well-being while engaging in any and all of lives activities. Meditation has been reported to reduce psychological stress and stress-related health problems in so many studies (Kabat-Zinn, Massion, Kristeller, Peterson, Fletcher, Pbert, Lenderking, and Santorelli, 1992; Manocha, Gordon, Black, Malhi, and Seidler, 2009; Goyal, Singh, Sibinga, Gould, Rowland-Seymour, Sharma, Berger, Sleicher, Maron, Shihab, Ranasinghe, Linn, Saha, Bass, and Haythornthwaite, 2011.

**Cognitive behavioral therapy:** This therapy is based on the idea that stress is a result of distortions in one's thought process. Filtering polarized thinking, overgeneralizations, jumping to conclusions, catastrophizing, personalization etc. are some examples of cognitive distortions which lead to negative thinking, behavior, emotions, and finally stress. The central idea of this therapy is to replace irrational and negative thoughts with rational and positive ones. In this therapy, the counselor helps the client to get rid of his problems by altering the way he thinks and behaves through talking. A number of studies have reported cognitive behavior therapy a

promising stress management technique (Granath, Ingvarsson, Von Thiele, and Lundberg, 2006; Kar, 2011; Hofmann, Asnaani, Vonk, Sawyer, and Fang, 2012).

**Relaxation technique**: Relaxation technique is a powerful weapon against stress and stress related health problems. In this technique, people are trained to alternatively flex and reflex their muscles so as to gain control over the relaxation response. Relaxation techniques are often used as a part of a wider stress management program and can reduce muscular strain, lower the blood pressure and slow heart and breathe rates, with many other health benefits (Mohtaram, 2008; Navaneethan and Soundararajan, 2010).

**Yoga:** Yoga is known as a mind-body practice that integrates all aspects of health- physical, psychological, social, spiritual, and emotional. Yoga is a combination of body postures, controlled breathing, and meditation. The practice of yoga produces a biological state contrary to that of the fight-or-flight stress reaction and with that interference in the stress reaction, a state of equilibrium and union between the mind and body can be attained (Arora and Bhattacharjee, 2008). Yoga is found to increase muscular power and body flexibility, stimulates and improve respiratory and cardiovascular function, improve recovery from and treatment of addiction, lower stress, anxiety, depression, and chronic pain, improve sleep patterns, and enhance overall wellbeing and quality of life (Woodyard, 2011).

**Hypnosis**: It is known as a state of heightened suggestibility which can be used to help clients to comply with direct suggestions for behavior change. It helps the clients to control their negative feelings, behaviors, and thoughts associated with stress. In other words, it can be stated that hypnosis gives a person the ability to control his reactions to stress. Hypnosis has been found very helpful in alleviating various types of stress and stress related problems (Ammond, Davidson, and Kovitz, 1971; Whitehouse, Dinges, Orne, Keller, Bates, Bauer, Morahan, Haupt, Carlin, Zaugg, and Orne, 1996). viii.) Physical Exercise: Physical exercise is any bodily movement that demands energy and helps to enhance and maintain physical and mental fitness and overall health. American Heart Association (AHA) states that physical activity can improve one's quality of life mentally as well as physically, and can lower one's overall stress level. Regular exercise plays an important role in managing weight and stress by reducing the tension,

anxiety, anger, and mild depression that often go hand-in-hand with stress. A number of researches have shown a direct relationship between increased levels of physical exercise and increasedhippocampal volume, increased cerebral blood flow, enhanced spatial memory, and reduced brain tissue loss (Colcombe, Erickson, Raz, Webb, Cohen, Mcauley, and Kramer, 2003; Pajonk, Wobrock, Gruber, Scherk, Berner, Kaizl, Kierer, Muller, Oest, Meyer, Backens, Schneider-Axmann, Thornton, Honer, and Falkai, 2010). Research has shown that performing physical activity on the daily basis is an effective means of reducing anxiety and stress and improving psychosocial health (Dunn, Trivedi, and O'Neal, 2001; Bhui, 2002; Economos, Hildebrandt, and Hyatt, 2008).

#### References

[1] Ammond, D.M., Davidson, P.O, & Kovitz, D.M. (1971). A comparison of the effects of hypnosis and relaxation training on stress reactions in a dental situation. American Journal of Clinical Hypnosis, 13. 233-242. [2] Arora, S. & Bhattacharjee, J. (2008). Modulation of immune response in stress by yoga. International Journal of Yoga, 1. 45-55. [3] Bhui, K. (2002). Physical activity and stress. In S.A. Stansfeld, & M.G. Marmot (Eds.), Stress and the heart: Psychosocial pathways to coronary heart disease. Williston, VT: BMJ Books, (pp. 158–167) [4] Colcombe, S. J., Erickson, K. I., Raz, N., Webb, A. G., Cohen, N. J., Mcauley, E., & Kramer, A.F. (2003). Aerobic fitness reduces brain tissue loss in aging humans. The Journals of Gerontology, Series A Biological Sciences and Medical Sciences. 58, 176–180. [5] Datey, K.K. (1980). Role of biofeedback training in hypertension and stress. Journal of Postgraduate Medicine, 26, 68-73. [6] Dunn, A.L., Trivedi, M.H., & O'Neal, H.A. (2001). Physical activity dose-response effects on outcomes of depression and anxiety. Medicine & Science in Sports & Exercise, 33, 609–510. [7] Economos, C., Hildebrandt, L., & Hyatt, R (2008). College freshman stress and weight change: Differences by gender. American Journal of Health Behavior, 32, 16-25. [8] Goyal, M., Singh, S., Sibinga, E.S., Gould, N.F., Rowland-Seymour, A. Sharma, R., Berger, Z., Sleicher, D., Maron, D.D., Shihab, H.M., Ranasinghe, P.D., Linn, S., Saha, S., Bass, E.B. & Haythornthwaite, J.A. (2014). Meditation programs for psychological stress and well-being: A systematic review meta-analysis. JAMA International Medicine, 174. 357-368.

[9] Granath, J. Ingvarssaon, S., Von Thiele, U., & Lundberg, U. (2006). Stress management: a randomized study of cognitive behavioral therapy and yoga. Cognitive Behavioral Therapy, 35, 3-10. [10]Hofmann, S. G., Asnaani, A., Vonk, I. J. J., Sawyer, A. T., & Fang, A. (2012). The Efficacy of Cognitive Behavioral Therapy: A Review of Meta-analyses. Cognitive Therapy and Research, 36(5), 427–440.

[11]Hosseini, S., Nourbakhsh, P., & Sepasi, H. (2013). Relationships between time management Science 5, and job stress. Archives of Applied Research, 301-307. [12]Kabat-Zinn, J., Massion, A.O., Kristeller, J., Peterson, L.G., Fletcher, K.E., Pbert, L., Lenderking, W.R., &Santorelli, S.F. (1992). Effectiveness of a meditation based stress reduction program in the treatment of anxiety disorders. American Journal of Psychiatry, 149, 936-943. [13]Kar, N. (2011). Cognitive behavioral therapy for the treatment of post- traumatic stress 167-181. disorder: a review. Neuropsychiatric Disease and Treatment, 7, [14]Lemaire, J.B., Wallace, J.E., Lewin, A.M., Grood, J.E., & Schaefer, J.P. (2011). The effect of a biofeedback-based stress management tool on physician stress: a randomized controlled clinical trial. [15]Macan, T. H., Shahani, C., Dipboye, R.L. & Phillips, A.P. (1990). College students' time management: correlations with academic performance and stress. Journal of Educational 82. 760-780. Psychology, [16]Manocha, R., Gordon, A., Black, D., Malhi, G., &Seidler, R. (2009). Using meditation for less stress and better wellbeing. Australian Family Physician, 38. 454-458. [17]Mohtaram, N. T. (2008). The effect of progressive relaxation training on stress management due Journal to daily life events. of Developmental Psychology, 4. 321-332. [18]Morgan, C.T., King, R.A., Weisz, J.R., & Schopler, J. (1993). Introduction to Psychology. New Delhi: Tata McGraw-Hill. [19]Navaneethan, B., &Soundararajan, R. (2010).Effect of progressive muscle relaxation training on competitive anxiety of male inter-collegiate volleyball players.International Journal of **Sports** Sciences Engineering, 4. 161-164. and [20]Nestoriuc, Y. & Martin, A. (2007). Efficacy of biofeedback for migraine: a meta-analysis. Pain, 128, 111-127. [21]Nestoriuc, Y., Martin, A., Rief, W., & Andrasik, F. (2008). Biofeedback treatment for headache disorders: a comprehensive efficacy review. Applied Psychophysiology and Biofeedback, 33, 125-140. [22]Pajonk, F. G., Wobrock, T., Gruber, O., Scherk, H., Berner, D.,

Kaizl, I., Kierer, A., Muller, S., Oest, M., Meyer, T., Backens, M., Schneider-Axmann, T., Thornton, A.E., Honer, W.G., & Falkai, P. (2010). Hippocampal plasticity in response to exercise in schizophrenia. Archives General Psychiatry, 67, 133–143. of [23]Whitehouse, W.G., Dinges, D.F., Orne, E.C., Keller, S.E., Bates, B.L., Bauer, N.K., Morahan, P., Haupt, B.A., Carlin, M.M., Zaugg, L., &Orne, M.T. (1996). Psychosocial and immune effects of self-hypnosis training for stress management throughout the first semester of medical school. Psychosomatic Medicine, 58, 249-263. [24]Woodyard, C. (2011). Exploring the therapeutic effects of yoga and its ability to increase of life. International quality Journal of Yoga, 4(2), 49-54. [25]Zaidi, U. (2015). Time Management and professional stress among bank managers: A correlational Study. IOSR Journal of Business and Management, 17, 83-87.