



Stress and coping with stress

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Abstract

Stress is your body's reaction to being under pressure from a circumstance or occurrence. It could be an emotional, mental, or bodily reaction. Stress is unavoidable; we must learn to live with it and successfully handle it, if not cope with it. Stress is best characterised as a syndrome caused by multiple factors with a wide range of manifestations ranging from mild to severe within the physical and mental framework of the human body. Stress can have a variety of impacts on the body, ranging from changes in homeostasis to life-threatening effects and death, depending on the nature, timing, and severity of the applied stimulus. Many diseases and pathological situations are made worse by stress, which can be a triggering or aggravating factor. Stress and sickness have a complicated relationship. Susceptibility to stress differs from one person to the next.

Keywords: stress, body's response, coping skills, relaxation, activity and exercise

Introduction

The maintenance of life, according to Claude Bernard (1865-1961), is fundamentally dependent on maintaining our internal milieu constant in the face of a changing world. This was dubbed "homeostasis" by Cannon (1929). The term "stress" was coined by Selye (1956) to describe the effects of anything that substantially threatens homeostasis. Selye, widely regarded as the pioneer of stress research, began researching the phenomenon of stress more than 50 years ago ^[1]. Stress occurs when homeostasis is threatened or perceived to be so ^[2]. Stress can have a negative impact on one's health, work performance, social life, and family relationships ^[3]. Stress is a natural reaction to the inability to cope with specific demands and situations. If a person does not take actions to manage stress, it might become a chronic condition. Work, relationships, financial obligations, and other conditions can all generate stress, but anything that poses a real or perceived threat to a person's well-being can induce stress. Stress isn't always a negative experience. In fact, certain stress is necessary for people to function well. Tuning a violin is a good analogy for the relationship between performance and stress. There will be no music if the strings are not taut enough; nevertheless, if the strings are taut too much, the string will break.⁴ Doctors are subjected to significant amounts of stress in the course of their work and are especially vulnerable to burnout ^[5]. One of the most expensive occupational health issues is workplace stress ^[6].

Stress related clinical conditions/diseases of civilization

Stress and sickness have a complicated relationship ^[7]. Stress hormone (cortisol, NE) and, in particular, No activity are involved in seven common pathophysiological pathways in stress-related illnesses ^[8]. Hypertension, Coronary Artery Disease; Asthma; Cardiovascular - Hypertension, Coronary Artery Disease; Respiratory-Asthma; Endocrinology - Diabetic Mellitus; Gastrointestinal System - Peptic Ulcer Disease Anxiety, depression, insomnia, headaches, suicide, reduced cognitive function such as memory loss, and reflex epilepsy are all symptoms of the central nervous system. Premenstrual tension causes menstrual abnormalities. Impotence and frigidity in the genito-urinary system; Aphasia, speech stuttering Anorexia, bulimia, and binge eating are examples of eating disorders. Certain medical illnesses, such as cancer and HIV/AIDS, can cause stress.

Infectious diseases, cancer, and autoimmune disorders are all immune-related disorders that can be influenced by stressful events ^[9].

Studies linking chronic stress to greater susceptibility to the common cold, lower antibody responses to vaccination, and delayed wound healing have established the importance of stress's impacts on immune-related health outcomes in people. Furthermore, stress and depression have been linked to increased morbidity and mortality in infectious diseases such as HIV infection, autoimmune disorders, neoplastic diseases, diabetes, and

cardiovascular disorders, all of which are increasingly being recognized as diseases in which the immune system, specifically inflammation, plays a pivotal role^[10].

A stressor is any circumstance or event that generates stress.¹¹ Individual, interpersonal, and environmental stressors all exist. Physiological, biological, psychological, and behavioural reactions are all examples of stress responses. Relaxation, biofeedback, autogenic training, skill training, operant procedures, cognitive behaviour, emotional behaviour therapy, stress inoculation training, anxiety management, aversion tactics, psycho education, and behavioural counselling are some of the strategies used to manage stress. What goes on in a person's mind, their thoughts and emotions, can have an impact on sickness, the development of some, and the aetiology of many, if not all, diseases. One-third of patients who visit a doctor have physical symptoms as a result of psychological symptoms or distress, another one-third have medical conditions as a result of behavioural choices such as smoking, drinking, and poor dietary habits, and the remaining one-third have medical diseases such as CAD, HTN, and DM that are strangely influenced by their mood, coping skills, and social support. Cognitive behaviour methods can improve the cause and lessen the need for costly medical treatment in all of these people.

Methods for stress management

Life style modification

1. **Diet:** Dietary modification includes regulating the calorie consumption, reduce fat and salt intake, increase fibre intake.
2. **Activity and exercise:** Avoidance of sloth and being lazy, sufficient activity and exercise depending on age, sex and physical condition, adequate sleep.
3. **Habits:** Avoid tobacco in any form, drinking alcohol and use of non-medical drugs.

A person under stress has a lot of "NOT's" and "CANT's" which reduces the quality of life and makes a happy and fulfilled life not possible. Changing "NOT's" and "CAN'T's" are important.

Coping skills/ Relaxation

Relaxation is a coping mechanism for stress; it is something pleasurable that provides a sense of calm and happiness. Relaxation isn't about competing or trying to be the greatest. Autogenic training, progressive muscular relaxation, visualisation and breathing exercises, chi gong, and yoga are examples of appropriate relaxation approaches^[12].

Model F: Resilience as Mental Health- Humans employ three different types of coping methods to deal with stressful events. First, there's the technique in which a person elicits assistance from the right people: Specifically, actively seeking social support. Second, there are deliberate cognitive methods that people employ to manage stress. Third, adaptive automatic coping systems (commonly referred to as "defence mechanisms") skew our perspective of internal and external reality to alleviate subjective suffering, anxiety, and sadness.

Relaxation techniques involve sitting in a quiet spot with no interruptions in a comfortable posture, setting a regular time and practising it every day. Learn to breathe properly, that is, deeply and slowly, close your eyes and concentrate just on breathing- take a deep breath and bring it down into your abdomen and let it go, feeling the tension release as you breathe. Develop interests such as playing instruments, listening to music, reading, painting, gardening, and knitting.

Expressing feelings and feeling free to seek assistance from others when needed, saying "NO" to unwarranted requests, and requesting additional information when something is not understood. Start and end conversations without being ashamed, give and receive compliments without being embarrassed, and express irritability or disappointment freely. Listen to unpleasant feelings that people may have against you, confront them, and refuse to accept unfair treatment from others. Laughing at jokes is a coping mechanism.

Reduced heart rate, blood pressure, sweating, hormone production, breathing pattern, electrical activity and relaxation muscle and skin, reduced ECG activity, improved immune system efficiency, increased attention and concentration, increased calmness, accelerated brain waves, feeling of wellbeing and peace are some of the changes that occur during relaxation.

Learning to relax is primarily an attitude, skill, habit, restorative, protective, and preventative talent. Adopting a calm posture, stopping rushing around, and preparing to relax are all examples of developing a relaxed attitude. Make your relationship a priority, pick a strategy that appeals to you and adhere to it, set up a specified time, find a relaxing location, make relaxation a habit, and learn to relax at your own pace. Sleep alone is insufficient for relaxation.

Stages of relaxation

1. Preparation
2. Practice - Basic Exercises (muscle groups, breathing, etc.)
 - Physical and mental relaxation
3. Application -apply in anxiety
 - Evoking/stressful situations
 - Less stressful to more stressful situation
 - Deal with unnecessary everyday tension causing activities

Meditation as Relaxation—Practice of meditation produced a relaxation response even in the young adult subjects who had never practiced meditation before.¹³ It is an active process which seeks to exclude outside thoughts.

Breathing

Focussing on an object like flowers, candle, homas, design. Example: shape, color, texture, temperature, movement of object.

Focus on a sound like listening music.

Visual imagery as relaxation- pictures in our mind are closely related to our emotional response, visual imagery is the use of self-directed mental images to create a calm and relaxed state. Example- sitting on a quiet beach.

Relaxation Response is based on principles of time management for 20 minutes, it reduces physiological arousal. Specific mantra like sound and picture is given. Steps include a passive attitude to mental distraction and worries using a neutral focal device to engage the attention.

Autogenic Training

Based on hypnosis, which uses persuasive self-statements like "I am at peace," "My arms are heavy," "My arms are warm and relaxed," "My breath is quiet and even," and "My forehead is pleasantly cool."

Physical activity not only improves health but also relieves stress caused by inactivity, relaxes tight muscles and aids sleep, improves blood circulation to the brain, toxins are cleared more effectively, and endorphins are released. Exercise should be enjoyable; if you don't maintain doing it, you may lose interest.

Relaxation is a talent; practise it whenever you are anxious, make it a habit to relax whenever you are tense, and use it in everyday issue situations.

Management of time effectively

Why do we need to manage our time effectively?

Effects of poor time management can lead to a range of stress related problems, time cannot be controlled but only be managed.

Questions to ask ourselves – Do I have enough time to do the things I would like to do?

Do I regularly cancel leisure activities because I have too much to do?

Do I find myself feeling there are not enough hours in the day?

In what ways do I manage my time well?

In what activities would I manage my time more effectively?

What activities would I like to spend least?

Top time wasters: interruptions, people dropping by, poor information exchange, techno failure, change in priorities, poor organisation planning, poor listening skills, inappropriate structure of organisation, indecision, distraction, frequent checking.

Time Allocation: personal time, work time, home time, other time, bed time, quiet time.

Personal time management: identify current time practice, daily time log, diary to understand current use.

Waste disposal: source of waste –calls, breaks, distractions, doing sub-ordinate work, delegation and allocation, doing the work of others, external appointment.

Scheduling project/deadlines, planning /prioritising by objectives, reactive/proactive tastes and planning in advance for future work, using diaries, personal organisers, to-do lists, filing systems, setting realistic deadlines, avoid non-specific time frames like as soon as possible/urgent/give date and time, reminders and prompts, getting rid of non-essential thoughts and avoid being a cluster consultant.

What is a Problem?

A life issue that necessitates effective functions but for which the individual or group confronted with the plan has no quick effective solution. Existing or projected issues that necessitate reactions in order to function well, but which are not met by effective coping from the individuals hired by them due to particular impediments.

Obstacles such as real-life situations can cause stress, ambiguity, confusion, conflicting demands, a lack of resources, and the problem's uniqueness if they are not handled with properly. A problem might be a single occurrence, a series of occurrences, or a persistent situation.

Solution –coping responses designated to alter the nature of the problematic situation.

Effective solutions – achieve goals, maximise positive consequences, minimise negative consequences.

What is problem solving? It can be understood as a coping mechanism or skill to deal with stressor or potentially stressful situations.

Self-management

systematic and rational, general coping strategy, learning process.

5 steps in problem solving

A. Problem Orientation

1. Problem perception
2. Problem identification

3. Problem appraisal
4. Problem control
5. Time /effort commitment

Problem Orientation: immediate thoughts and feelings about the problem at hand, beliefs, causal attributions, past successes and failure of values. Positive problem orientation is facilitative for effective coping.

B. Problem definition/formulation

1. Gathering relevant information
2. Understanding the problem: what is and what should be
3. Setting a realistic goal: specific,concrete, attainable
4. Re appraising the problem(alternative problem formulation, real problem, misconceptions, errors in thinking, irrational beliefs about problem and its formulation)

C. Generation of alternative solutions

1. Quantity principle
2. Determent of judgement principle
3. Variety principle- flexibility at the level of generation

Examples: worst solutions are not always the best, more alternative solutions that are produced; the more quality solution will be produced. Critical evaluation of solution to be at the decision making level.

D. Decision making

1. Anticipate: especially total experience benefit short/long term.
2. Evaluate: judging and comparing by emotional well-being, time and effort, personal / social well-being, problem resolution.
3. Prepare a solution plan: is the problem solvable? Outcome evaluation.

E. Solution implementation/verification

1. Carrying out or performance: lack of skills, emotional inhibitions, motivational deficits.
2. Self-monitoring
3. Self-valuation
4. Self-re-enforcement
5. Trouble shooting and recycling

Maladaptive coping style

Both maladaptive and adaptive emotion regulation strategies have been linked with psychopathology.¹⁴Individual blames self for problems, attributes it to fate, incompetence. Problem as threat to emotional, physical, social well-being. Little real hope of coping effectively. Belief that a competent person should solve problems without much efforts and quickly.

Effective coping style

Coping behaviour is a response to aversive situations ^[15]. Problem as normal, ordinary, inevitable event in life. Problem as challenge or opportunity for personal growth. Solution available and accessible with success. Awareness that the solution will take time and effort.

Psychological methods of stress management

Table 1

Birthday 1 st January 2001 Happy event last 3months Last situation when you were happy	Happy All positive thoughts Missing company of distant friends What kind of thoughts happening in the mind? What all different kinds of experiences o feelings you had yourself?	Good Jolly Enlightened Cheerful Thoughts are irresistible
Death of close relative 15 th January No promotion	Sad, unhappy Lost Thought came up: how I can solve his family problems?	Felt natural event Wanted more help for other people Adjusted to life

The 5 'R's as core concepts of stress management

1. Recognition of the causes/sources of stress or distress, education/conscious raising.
2. Relationship identified for support, help and reassurance.
3. Removal from (or of) the threat or stressor; managing the stimulus.

4. Relaxation through techniques such as meditation, massage, breathing exercise or imagery.
5. Re-engagement through managed re exposure and desensitisation.

LESS-Stress – a task

1. L – Less goals, both short and long range; eliminate those not attainable.
2. E – Establish a hierarchy of tasks based on realistic time requirements /priorities.
3. S – Subdivide remaining tasks into manageable units/projects.
4. S – Start with achievable /doable tasks starting with the hardest task may promote procrastination.

Remember to interrupt stressor, envision, share, structure-non work hours to provide for adequate exercise, distraction, nutrition and sleep.

Knowing your comfort zone limits

1. Sleep – hours
2. Work – break
3. Break for refresh
4. Signs of boredom example: restlessness, confusion, etc.

How to prevent being burnt-out?

Burnout, as a long-term consequence of impairing mental strain, is distinct from and presumably temporally-causally related to specific impairing short-term consequences of mental strain [16]. Be realistic, plan your time /priorities, limit life changes, establish social support, learn to relax, take a break before you feel tired of, exercise, release your emotion, clear your desk, plan for time outside work.

Positive self-statements

In the presence of stress an individual can develop coping by using self statement, this can be done in 3 phases.

1. **Prepare for a stressor:** helps to focus on specific preparation for task, combat negative thinking and emphasize planning/preparation.

Examples: ‘what is it I have to do?’

- I can develop a plan to deal with it
- It is better to think what I can do rather than getting anxious
- I can work out a plan to handle that
- Remember, stick to the issue and don’t take it personally
- Stop worrying, worrying won’t help anything

2. **Confronting and handling a stressor:** It helps to control stress reaction, reassure that one can handle situation, re-interpret stress, reminder task, and remain focussed on task or situation.

Example:

- I can convince myself to do it
- I can meet the challenges
- Relax, I am in control
- I can handle the situation
- As long as I keep cool, I am in control of the situation
- Don’t make more out of this than I have to
- Look for positives, don’t jump to conclusions

3. **Coping with feeling of being overwhelmed:** This stage does not always occur, helps to set up contingency plans, prepare for possibility of becoming extremely stressed, prepare to deal with worst situations.

Example:

- When stress comes just pause
- Keep my focus on the present, what is it I have to do?

4. **Evaluation of coping efforts and self-rewards:** Help to evaluate attempt what helped and what did not? Look back over experience to see what has been learned.

Example:

- It was not as bad as I expected
- What can I learn from my try
- I was able to do it
- I made more out the fear than it was worth
- I did not work; that is okay
- I handled it pretty well
- Good, I did it, next time I will do even better

Faulty thinking and irrational beliefs

Make us look on the black side so that we expect worst, they are usually incorrect and unreasonable making us expect too much from ourselves or others, this leads to disappointment /frustration.

How to deal? Example:

- Learn to recognize your negative thoughts
- Challenging
- More realistic and positive thinking
- Avoid unreasonable expectations
- Avoid unreasonable assumptions

It is not polite to ask for second help

Table 2

Putting the pressure on	Taking the pressure off
I have to get this done	I will do as much as I can in the allowed time
I should not ask for help	Everyone asks for help sometimes, I would happily help someone else

Relaxation Therapy

Relaxation techniques have been used increasingly in therapy with people who present with diverse anxiety and stress-related problems ^[17]. Muscle relaxation is used as a component of treatment programs (e.g., systematic desensitization) or as treatment in its own right (relaxation therapy). Relaxation is characterized by (1) immobility of the body, (2) control over the focus of attention, (3) low muscle tone, and (4) cultivation of a specific frame of mind, described as contemplative, nonjudgmental, detached, or mindful.

Progressive relaxation was developed by Edmund Jacobson in 1929. Jacobson's method of progressive relaxation is contrasted with modified techniques that emphasize suggestion, brevity and the feeling of large contrasts between tension and relaxation.¹⁸ Jacobson observed that when an individual lies "relaxed," in the ordinary sense, the following clinical signs reveal the presence of residual tension: respiration is slightly irregular in time or force; the pulse rate, although often normal, is in some instances moderately increased as compared with later tests; voluntary or local reflex activities are revealed in such slight marks as wrinkling of the forehead, frowning, movements of the eyeballs frequent or rapid winking, restless shifting of the head, a limb, or even a finger; and finally, the mind continues to be active, and once started, worry or oppressive emotion will persist. It is amazing that a faint degree of tension can be responsible for all of this. Learning relaxation, therefore, involves cultivating a muscle sense. To develop the muscle sense further, patients are taught to isolate and contract specific muscles or muscle groups, one at a time. For example, patients flex the forearm while the therapist holds it back to observe tenseness in the biceps muscle. (Jacobson used the word "tenseness" rather than "tension" to emphasize the patient's role in tensing the muscles.) Once this sensation is reported, Jacobson would say, "This is your doing! What we wish is the reverse of this—simply not doing." Patients are repeatedly reminded that relaxation involves no effort. In fact "making an effort is being tense and therefore is not to relax." As the session progresses, patients are instructed to let go further and further, even past the point when the body part seems perfectly relaxed.

Humour

Humour and laughter can be effective self-care tools to cope with stress.¹⁹ Comes in varieties of forms, good supportive system from environment. Humour helps us make sense of, understand, and cope with reality and serves as nature's biofeedback, stress-control system ^[20].

Conclusion

No single method is uniformly successful. A contribution of approaches stress can be positive as well as negative. Stress may play a part in making people vulnerable to illness.

“Grant me the courage to change the things I can change, the serenity to accept the things I can’t change and wisdom to know the difference”-Reinhold Niebuhr

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