Newsletter

STRESS AND ITS MANAGEMENT: A REVIEW

Vinayak M Gaware*¹, Archana Chavanke¹, Ramdas T Dolas², Kiran B Kotade³, Kiran B Dhamak¹, Sachin B Somwanshi², Vikrant K Nikam², Autal N Khadse¹, Prajakta R Gangurde³

- 1. Department of Pharmaceutical Chemistry, College of Pharmacy Chincholi, Sinnar, Nashik, M.S, 422101.
- 2. Department of Pharmaceutics, College of Pharmacy Chincholi, Sinnar, Nashik, M.S, 422101.
- 3. Department of Pharmacology, College of Pharmacy Chincholi, Sinnar, Nashik, M.S, 422101.

Corresponding author*:

Vinayak Madhukar Gaware

Lecturer, Department of Pharmaceutical Chemistry,

College of Pharmacy, Chincholi, Sinnar, Nashik, M.S (422101)

E-mail: vins_gaware1@rediffmail.com

Summary

Stress is simply a fact of nature forces from the inside or outside world affecting the individual. The individual responds to stress in ways that affect the individual as well as their environment. Stress management is a widely used term with apparent meaning. The studies tell its effectiveness, but it is not clear how many different forms of stress management exist and how efficacious they are for which target problem. In the present review we have focused on various types of stress and the various management techniques to be away from stress.

Keywords: Environment, Exercise, Immune, Stress

Introduction

Stress is simply a fact of nature forces from the inside or outside world affecting the individual. The individual responds to stress in ways that affect the individual as well as their environment. Because of the overabundance of stress in our modern lives, we usually think of stress as a negative experience, but from a biological point of view, stress can be a neutral, negative, or positive experience. In general, stress is related to both external and internal factors. External factors include the physical environment, including your job, your relationships with others, your home and all the situations, challenges, difficulties and expectations you're confronted with on a daily basis¹. Internal factors determine your body's ability to respond to and deal with, the external stress-inducing factors. Internal factors which influence your ability to handle stress include your nutritional status, overall health and fitness levels, emotional well-being and the amount of sleep and rest you get. Stress has driven evolutionary change (the development and natural selection of species over time). Thus, the species that adapted best to the causes of stress (stressors) have survived and evolved into the plant and animal kingdoms we now observe. Stress can be defined as 'the way your body responds to the demands of your life style' i.e., the effects of wear and tear on your body '.

Pharmacologyonline 2: 1319-1334 (2011) Newsletter Gaware *et al.*

Most people think of stress as a mental state but it is in fact, very largely, a physical condition. When a person is subjected to a stress- producing effect known as stressor (a challenge, pressure, stimulus, external influence, etc.) it is registered in the brain. The brain gives various parts of the body instructions for a chain of reactions known as stress reaction or stress response. Different People can tolerate different levels of stress. Each person needs to work on their own stress control techniques according to their tolerance levels ².

ORIGIN^{3,4}

The term *stress* was first employed in a biological context by the endocrinologist Hans Selye in the 1930s. He later broadened and popularized the concept to include inappropriate physiological response to any demand. In his usage *stress* refers to a condition and *stressor* to the stimulus causing it. It covers a wide range of phenomena, from mild irritation to drastic dysfunction that may cause severe health breakdown.

CAUSES OF STRESS ^{5, 6, 7}

Many external and internal factors can cause stress.

> Environment

We all have highly individual responses to the world around us. One person may feel equally comfortable in a small town and a big city whereas another person may be overwhelmed by a city's noise, intense pace and crowded streets.

➢ Events

From taking final exams to introducing your significant other to your family, many situations can lead to stress. Some examples of stressful events include personal or family illness, increased work load, roommate conflicts and more. Multiple events often combine and can leave you feeling weighed down.

> Expectations

Many of us demand a lot from ourselves and from others. Examples of expectation-related stress include receiving lower grades than expected and not getting certain internships or jobs. Stress has a close link with perfectionism.

Common external causes of stress

Not all stress is caused by external factors. Stress can also be self-generated:

Major life changes	Financial problems	
• Work	Being too busy	
Relationship difficulties	Children and family	
Table 1. Common external causes of strong		

Table 1: Common external causes of stress

Common internal causes of stress

Not all stress is caused by external factors. Stress can also be self-generated:

• Inability to accept uncertainty	Unrealistic expectations
• Pessimism	• Perfectionism
• Negative self-talk	Lack of assertiveness

Table 2: Common internal causes of stress

Newsletter

SOME CAUSES OF STRESS^{8,9}

- Working too hard without breaks. This applies to almost any time scale. That is, stress can be caused by working for many months without a holiday and/or by working too many days without resting (e.g., on Sunday). Stress can occur even throughout the day by your failing to take a short restful break every 90 minutes or so.
- **Insufficient or abnormal sleep**. Americans now sleep one hour less than they did 100 years ago. Many Americans stay up late watching television, get up early and have a long commute. According to sleep experts, people simply are not getting sufficient sleep. In addition, they often have erratic sleep schedules with late nights and much less sleep on the weekends. The "Monday morning blues" are very real and are not just due to a person's dread of returning to work.
- **Major life stressors** (e.g., death of a loved one, divorce, job loss). Even major positive changes (e.g., job change) can be stressful because the nervous system may still react as if there is a crisis
- **Minor hassles**. Studies have shown that "minor" hassles on a daily basis without countering them with stress-reduction techniques may have even more deleterious effects than major stressors because they occur frequently and are additive.
- Physical illness, particularly if chronic. Surgery or hospitalization can also be stressful.
- ٠

CAUSES STRESS OVERLOAD^{10, 11}

Although just enough stress can be a good thing, stress overload is a different story — too much stress isn't good for anyone. For example, feeling a little stress about a test that's coming up can motivate you to study hard. But stressing out too much over the test can make it hard to concentrate on the material you need to learn. Pressures that are too intense or last too long, or troubles that are shouldered alone, can cause people to feel stress overload. Here are some of the things that can overwhelm the body's ability to cope if they continue for a long time:

- being bullied or exposed to violence or injury
- relationship stress, family conflicts, or the heavy emotions that can accompany a broken heart or the death of a loved one
- ongoing problems with schoolwork related to a learning disability or other problems, such as ADHD (usually once the problem is recognized and the person is given the right learning support the stress disappears)
- crammed schedules, not having enough time to rest and relax and always being on the go

Some stressful situations can be extreme and may require special attention and care. Posttraumatic stress disorder is a very strong stress reaction that can develop in people who have lived through an extremely traumatic event, such as a serious car accident, a natural disaster like an earthquake, or an assault like rape. Some people have anxiety problems that can cause them to overreact to stress, making even small difficulties seem like crises. If a person frequently feels tense, upset, worried, or stressed, it may be a sign of anxiety. Anxiety problems usually need attention and many people turn to professional counselors for help in overcoming them.

EFFECTS OF STRESS^{12, 13}

Stress response

The stress response can be described as a chain of reaction of changes within the body:

- Shallower, quicker breathing,
- Faster heart beat,
- Rise in blood pressure,
- Reduction in the blood supply to hands and feet,
- Increase in body's metabolism,

Newsletter

Gaware et al.

- Faster clotting of blood,
- Increased blood flow to the muscles,
- Reduction of blood supply to stomach and abdomen,
- Tensing of muscles,
- Sharpening of all senses,
- Reduction of tension in bowels and stomach functions,
- Reduction in the efficiency of the immune system.

Of course all these changes in the body also have an effect on the brain and this can cause an alert mental state, leading to:

- Faster activity of brain,
- Improvement of short term judgment,
- Faster decision making,
- Improved memory powers,
- Sharper focusing of the attention.

Positive effects of stress

Stress is valuable under certain circumstances, e.g. sports, making speeches and taking examinations. The stress response puts people on their mettle, increase alertness, improves sight, strengthens muscles and reduces reaction times. The stress response increases our ability to stand and fight or turn and flee and to mobilize all our resources to achieve whatever we decide to do.

Another positive is the zest that stress adds to life by stimulating the stress and the passions. Many people need challenge in their lives and would be unhappy without it. Stress only has a positive effect if it is not allowed to build up or feed on it, i.e. if it can be worked off.

Negative effects of stress

The negative effects of stress show particularly when a person allows stress to remain in the body, usually when a person allows stress to remain in the body, usually when there is no chance to take the necessary steps to release a stress response that is too strong or lasts too long.

The negative effects of stress show up in three ways in particular:

- Unsuitable behavior
- Lower energy and performance levels

> Poorer health

Here are some examples of the negative effects of stress:

- Unsuitable behavior
 - Loser behavior
 - Short temper
 - Bad smoking, eating and drinking habits
 - More frequent mistakes
 - Less flexibility

Lower energy and performance levels

- Reduced concentration
- Increased forgetfulness
- Poor judgment
- Prone to feeling of tiredness

Newsletter

Gaware et al.

STRESS SYMPTOMS 14, 15

The symptoms of stress are our physical, emotional and behavioral reactions to life's situations.

- The pounding of our hearts as the home team scores the winning point
- The feeling of frustration when the other team scores the winning point
- The boisterous hooray when we win and the angry curse when we lose

Levels of stress are categorized as acute, episodic acute and chronic. Stress symptoms are often indicative of our level of stress.

- Acute stress is the temporary type of stress we feel when we step back to the curb out of the path of an oncoming vehicle or when the home team wins (or loses). This type of stress is the most manageable. Our heart rates jump, blood pressures raise, tension headaches may ensue, we become momentarily angry, elated, boisterous, or resentful. We cry in
- joy, in relief, in frustration. The moment passes and we go on about or business.
 Episodic acute stress occurs when life's situations get the best of us, when Murphy's Law seems to be the rule of the day. One example is when we believe we deserve a raise or promotion, but don't act on our feelings. Another example is when life spins out of control with one disaster after another an illness, a divorce and loss of employment within a short time span. Symptoms like recurring headaches, indigestion, fatigue and insomnia are vivid warning signs of episodic acute stress. We can avoid episodic acute stress by recognizing its warning signs and coping with stressful situations as they occur. Without attention, this level of stress can lead to chronic stress.
- Chronic stress is that which literally wears us out, grinding us down until our bodies and minds react with serious long-term physical and/or mental disorders. Chronic stress occurs when situations become impossible to deal with, when there's "no way out" and we give up trying to overcome adversity.

Unfortunately, once stress becomes chronic, long ignored symptoms become invisible. Grinding teeth, tremors, confusion, forgetfulness, over-eating and alcoholism are just some of the symptoms that appear to be habits that are as unbreakable as the situations that caused them. Stress warning signs can help us gauge our level of stress. However, stress symptoms often overlap from one level to another. More importantly, many signs of stress can be caused by physical illness or mental disorders. Recognizing stress symptoms can help us keep stress from snowballing from acute to chronic, prompt us to seek medical help when we need it and keep us from suffering the debilitating effects of stress.

Stress Warning Signs and Symptoms	
Cognitive Symptoms	Emotional Symptoms
 Memory problems Inability to concentrate Poor judgment Seeing only the negative Anxious or racing thoughts Constant worrying 	 Moodiness Irritability or short temper Agitation, inability to relax Feeling overwhelmed Sense of loneliness and isolation Depression or general unhappiness
Physical Symptoms	Behavioral Symptoms
Aches and painsDiarrhea or constipation	Eating more or lessSleeping too much or too little

Newsletter

Gaware et al.

Stress Warning Signs and Symptoms		
 Nausea, dizziness Chest pain, rapid heartbeat Loss of sex drive Frequent colds 	 Isolating yourself from others Procrastinating or neglecting responsibilities Using alcohol, cigarettes, or drugs to relax Nervous habits (e.g. nail biting, pacing) 	

Table 3: Stress Warning Signs and Symptoms

RESPONSE TO STRESS^{16, 17, 18}

> PHYSICAL RESPONSE Transient condition

- Tachypnoea
- Tachycardia
- Flushed face
- Muscle tightening
- Cold clammy hands
- Tremors in the hands
- Gritting of the teeth

Sustained Condition

- Fatigue
- GI disorder
- Decreased efficacy of immune system
- Long recovery
- Endocrinal disorders (e.g. Diabetes, hypertension, libido, etc)

PSYCHOLOGICAL RESPONSE

- Feeling upset
- Inability to concentrate
- Anxiety

 \geq

- Loss of self confidence
- Worry
- Difficulty in decision making
- Racing thoughts
- Absent mindedness
- Depression
- Over emotional
- Apathy
- Confusion

> BEHAVIORAL RESPONSE

- Deterioration of performance
- Nervous mannerism
- Hostility
- Sleep disorders(Insomnia or excessive sleep)
- Eating disorder(Bulimia/anorexia nervosa)
- Addictions(smoking, alcoholism)
- Nail biting
- Indulgence in net surfing, hooked to television, talking over on telephone for hours.

Newsletter

Gaware et al.

> RESPONSE TO STRESS AT SCHOOL/COLLEGE/WORK PLACE

- Absenteeism
- Tired all the day
- Watch the clock to get free from
- Lack of concentration
- Not open to change

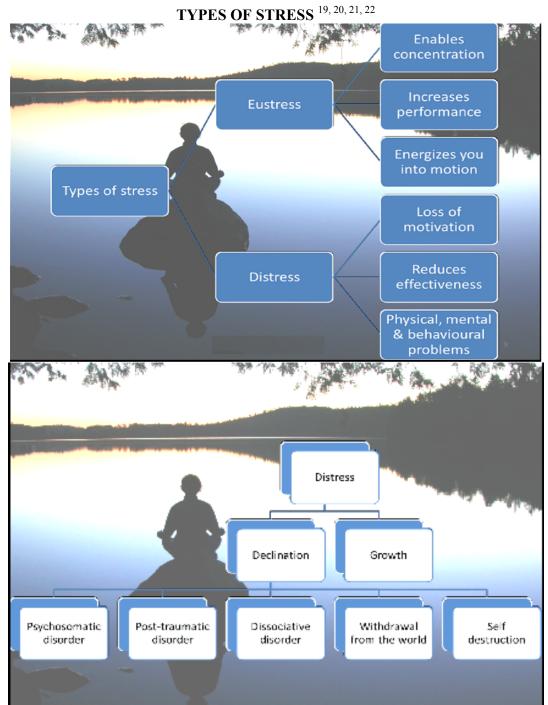
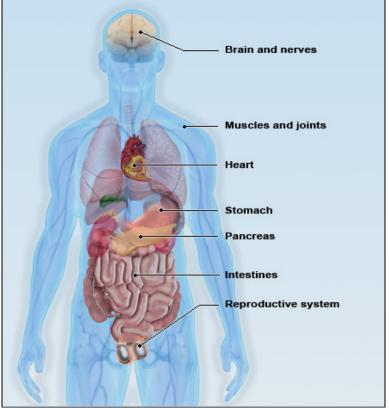


Figure 1: Types of stress

Newsletter



AREAS OF BODY AFFECTED BY STRESS

Figure 2: Areas of Body Affected By Stress

STRESS MANAGEMENT TIPS

• Manage your time

A lot of stressful situations arise from poor time management tardiness at work, inability to beat deadlines, lack of time for loved-ones, failure to attend meetings, etc. These are all results of not managing your time well. By sitting down regularly to plan ahead and sort your schedule, you can lessen the stress that comes your way.

• Learn breathing exercises

Learning about various breathing patterns can surely be your fastest way to relieve stress. You can do it anywhere, anytime. By breathing well, you let more oxygen into your body. These results in a more relaxed muscles and clearer mind.

• Exercise

Regular physical exercise can do wonders not only on your body but also your mind. It gives you more opportunity to breathe deeply. It also stimulates the release of endorphins so you can feel happier and content about things.

• Tidy up

Something about cleaning up is therapeutic. Try clearing your work table or cutting the clutter in your room. You'll surely be amazed at the results.

• Take a break

Never take the importance of taking a break for granted. It doesn't have to be a long vacation. You can take a short breather by simply walking around the neighborhood or the office. Seeing other people and things can be amazingly relaxing.

Newsletter

• Play some music

Choose some soothing music to play on the background. The soft keys could create a more peaceful and placid "world" for you.

• Eat a healthy diet

Bear in mind that everything you eat goes to each cell of your body. This means that if you only eat junk, then your body gets nothing but junk too. However, if you eat healthy, the essential vitamins and nutrients that can keep you strong and fit will be sufficient. This means that your body systems can work as efficiently as possible too. Needless to say, the healthier you are, the less stressful your life becomes.

• Cut down on the alcohol

Alcohol is a depressant and indulging in it can lead to a more stressful life. If you want to be really stress-free, drop the alcohol and start living clean.

• Pamper yourself

Pampering yourself doesn't have to be luxurious. A simple haircut or foot spa could do the trick.

• Sleep well

Sleeping is the time when your body renews its energy from all the strenuous activities of the day. Make sure that you get enough sleep every night so you can have enough energy to face a new morning. When you lack sleep, it can be very easy to be tensed and grumpy.

• Unleash Your Creativity

A superb way to manage stress is to write as it is an activity that requires full concentration. A lot of people keep journals to help get their thoughts in order. I'm a keen essayist specializing in the two world wars. Why not write about subjects you're interested in? Or maybe you can express yourself through art? Painting and drawing are two great stress busters and like writing, are creative, stimulating and rewarding. A canny idea is to use the Internet to search for sites that can help you get started.

STRESS MANAGEMENT FOR KIDS^{23, 24}

From the bogeyman for small children to the bogies of SATs and final exams for the college-bound, stress affects kids of all ages. The first thing a parent can do to help their child manage stress is to build a strong family unit. Include your children in family discussions and be on the lookout for stress in your kids.

• Recognizing Stress in Children

Especially small children with under-developed communication skills may display stress very differently than an adult does. Often kids' stress is internalized and most noticeable in physical symptoms such as frequent flu-like symptoms including headache, stomachache and even nausea.

Children under stress may regress to behaviors like bedwetting, clinginess and frequent crying. Behavioral symptoms may be extreme at both ends of a behavior spectrum. A normally active child becomes either listless or hyperactive, a usually docile child has fits of anger or a child that "acts out" becomes docile and introspective.

Some signs of stress in kids are easily confused with children's mental disorders. For instance, if schoolwork slides or your child's circle of friends undergoes a drastic change, it isn't a sure sign that your child is on drugs. Situations like these may simply indicate a child's inability to handle a stressful situation.

• Helping Kids Reduce Stress

Children primarily learn by example. The best way to teach your child how to manage stress is by using the tools and articles at Stress Management Tips to learn to effectively manage your stressors. In

Pharmacologyonline 2: 1319-1334 (2011)NewsletterGaware et al.

addition, you can develop skills and child-oriented stress management techniques to help your kids recognize and manage their stressors.

- Eat healthy. A healthy body is better able to withstand stress-induced illness. Schedule regular meals and snack times. Don't allow your child to skip meals.
- Vigorous exercise is a good stress reliever. Just like adults, kids need time to unwind. If your kids are bound to video games, television, or a computer, get them on their feet by providing and encouraging the use of active toys like balls, punch bags and bikes. If your child presently appears to be stressed, make a point of playing with them. Time spent with your kids is a great vehicle for getting them to open up the lines of communication.
- Be clear in setting rules and consistent with discipline. Kids live in a "black and white" world. Blurred guidelines and inconsistencies are even more confusing for them than they are for adults.
- Gentle physical touch is a great healer. Sometimes a hug is worth more than a thousand words. Another physical stress reliever can be a gentle massage of your child's neck and shoulders. Like you, your kids can also get knotted up with stress!
- Learn to be a good listener. When your child wants to talk about his or her problems, don't criticize. In addition, it isn't always necessary to give advice. Sometimes kids just need to talk. Encourage them with open-ended questions like, "So what happened next?" "How do you feel about that?"
- Teach your kids that everyone (including you) makes mistakes. A good start is admitting your mistakes to your children with an "I'm sorry" or "My mistake" when you goof-up. If the situation warrants, use personal examples of stressful situations you encountered during your childhood. Even if you were unsuccessful in dealing with your situation, you'll teach your kids that you can learn from and even laugh at your own mistakes.
- Finally, teach your kids stress relieving exercises and help them find stress reducing games they can play to reduce their stress.

STRESS MANAGEMENT IN THE WORKPLACE²⁵

Job stress is a common and costly problem in the American workplace, leaving few workers untouched.

- 1. A recent survey, published in the Journal of Occupational and Environmental Medicine, noted that for those working 12 hours a day, there was a 37% increase in risk of illness and injury in comparison to those who work fewer hours.
- 2. A study done by Northwestern National Life, reports that one-fourth of employees view their jobs as the number one stressor in their lives.
- 3. A St. Paul Fire and Marine Insurance Co. study concluded that problems at work are more strongly associated with health complaints than any other life stressor, even financial or family problems.

Stress in the workplace frequently hits you with a double whammy of two-way pressures that come from a combination of both internal and external stressors. Stress results in decreased job satisfaction, reduced production and increased conflicts, which all lead to - you guessed it - more stress! When you ignore stress signals, you are more liable to become ill or fatigued and to experience injury. As an employee, there are several steps you can take to preserve your health by reducing workplace stress.

External Stressors

Frequently employees tend to ignore problems created by external stressors because they feel that the problems are trivial, petty, or don't (or won't) merit the attention of the employer. However, often these problems have an easy solution. For instance, stress can be caused by something that seems as trivial as an incorrectly positioned chair or computer screen. Other examples of external stressors include loud or continuous noise, nosy or noisy co-workers, demanding bosses and complaining customers. If external stressors are causing problems for you, the worst thing you can do is ignore them. Identifying and

Pharmacologyonline 2: 1319-1334 (2011) Newsletter

Gaware *et al*.

examine external stressors for possible solutions. Even if all of them aren't resolved, any positive change you will result in a happier, healthier you.

• Internal Stressors

Internal stressors are not workplace problems by perceptions. Some examples are feelings of dissatisfaction, irritability, inability and the feeling that your efforts aren't properly rewarded or recognized. One helpful way to reduce internal stress is to remember what you liked about your job when you started it. Consider what has changed as well as what needs to change for you to be satisfied in your position again.

• Change your focus

You may not be able to cut back on hours at work, but you can work to live and not live to work. Because of the number of hours many employees work per week, the job can easily become all-encompassing. We wake and get ready for work, drive to work, spend eight or more hours at work and finally drive home from work. As you can see, although we aren't getting paid, we are "at work" for much longer than eight hours a day! Learning to keep work in focus during work hours and life in focus after hours will take you a long way towards managing workplace stress.

- 1. School yourself to wake and get ready, not for work, but for your day.
- 2. On the drive to work, listen to music, humor anything that isn't related to work.
- 3. Take an alternate route to work. The change in scenery will help you stay alert to the road and keep your mind off the job.
- 4. Plan your work and work your plan. Devote every paid minute to your job. Deviate from your work plan only when absolutely necessary.
- 5. Take your allotted breaks. Remember: the opposite of stress is relaxation. Don't work through lunch or coffee breaks. This also means don't think or talk about work during your breaks.
- 6. Instead of coffee, drink water, juice, or electrolyte infused drinks. Dehydration often is the cause of fatigue. Coffee and soft drinks that contain caffeine may seem to "keep you going", but in reality they add to stress and don't keep your body hydrated.
- 7. Keep a copy of Stress Management Tips, Stress Reliever Games and Stress Relieving Exercises nearby and refer to it when you need to get through a stressful occurrence.
- 8. Just as you plan your work, plan your time away from work. At day's end, leave work behind you and focus on your plans for the evening. Work to live. Relaxation away from work means less stress and a better day tomorrow.

STRESS RELIEVER GAMES²⁶

When tension mounts and frustration builds, it's a sure sign of stress. Playing a stress relieving game relaxes you and is a good way to win over stress! The trick to stress reliever games is to play ones you can win easily. What you want to do is show yourself that you can be successful. After you get a few "wins" under your belt, frequently you'll see your original problem in a new perspective.

• Internet Flash Games

From pounding a ground hog to batting a tennis ball, there are (virtually) tons of flash games on the Internet and best of all, most are free to play! The best way to load up your anti-stress arsenal is to do a simple search for "Free Flash Games" or "Flash Games" and bookmark a few of them in your favorites. Although shareware and free games often require a download, most flash games only need a moment or two to load in your browser window. If you're worried about pop-ups, look for flash games at reputable sites that sell flash software or offer flash tutorials.

• Computer Games

If you're running Windows, you already have a few easy stress reliever games on your PC. FreeCell, Minesweeper and Solitaire are great ways to relieve your stress. If you're tired of those, many Internet sites offer a free, timed-trial version of their computer games. These games are usually shareware and,

Pharmacologyonline 2: 1319-1334 (2011) Newsletter Gaware *et al.*

depending on your Internet connection, may take a few minutes to download. The selection is nearly endless. Choose from Arcade Games, Action Games, Puzzle Games and Strategy Games.

One advantage of downloaded computer games is that you needn't be connected to the Internet to play them. When your free trial is over, you can choose to either purchase the game or use the included uninstaller to erase it from your computer's hard drive.

• Off-line Stress-busting Games

If you're sitting all day at a computer, sometimes the best break is to get up and walk away. This is especially true when stress is caused by poor Internet Connections or system crashes. Here are a few games that are easy to keep on hand and excellent for helping you reduce your stress:

1. Got a deck of cards

Play a quick game of solitaire the old-fashioned way! Along with your deck, you might consider purchasing a book of Solitaire Games. Many books are specially published for Solitaire players and offer hundreds of games and game variations.

2. Rubik's Cube

Here's a tip: Anyone can match up one side of a Rubik's cube. Although trying to solve the whole puzzle can be stressful in itself, the few minutes it takes to match up the blocks on one side can help you quickly reduce your stress.

3. Slinky

Just bouncing a slinky back and forth from hand to hand puts your focus on the toy and takes it away from your problem. So bounce your slinky, take a few deep breaths and relax.

4. Punch balls

Okay, they're not a game, but they can be a great stress reliever and they're sure a better choice than hitting a wall or kicking the side of your desk when stress sets in! You can find cheap punch balls in toy departments, novelty stores and most dollar stores.

5. Darts

Whether you're hitting a target or targeting a photo, the physical motion of throwing the darts in itself will help reduce your stress. Dart balls stick to a Velcro board. They won't hurt you or your neighbor if you miss.

6. Crossword Puzzle Books

Many crossword puzzle books also include word-find games, mazes and other pencil puzzles. Buy some that have puzzles that range from easy to hard and tackle them according to your mood and your stress level.

STRESS RELIEVING EXERCISES 27

Surprise yourself! Although you may not think of exercise as stress relieving (if you've ever walked a treadmill for a stress test), a healthy body is a formidable weapon to combat stress. Of course, a fullblown exercise regime can't be completed at your desk, but there are several easy exercises that you can do to relieve tension and reduce stress. Even if your job is physically taxing, the exercises below are designed to help you unwind, relax and reduce stress.

1. Blow it off

Since breathing comes naturally, deep breathing is often overlooked as an exercise, but it's an excellent stress reducer. Breathe in while tucking in your tummy and feel the air as it expands your lungs and your chest. Breathe in to the count of four and hold it for two counts. Then exhale to the count of four. Take two to four deep breathes several times a day and soon daily stressors may well be "gone with the wind!"

Newsletter

2. Get up and stretch

Visualize the stress flooding from your back, legs, your shoulders and pour out of your fingertips and toes. Add to your stretches by taking the time to learn a few yoga positions, which you can find in books and videos as well as yoga classes.

3. Take a short walk after lunch or in lieu of a coffee break

A brisk ten or fifteen minute walk each day is not only physically beneficial but transfers your focus from your problems to the scenery along your route, whether it's the good-looking person in the hallway or the trees in the neighborhood park.

4. Squeeze a lemon

When life hands you a lemon, make lemonade!" Squeezing a lemon or tennis ball is a good way to keep your fingernails from biting into your palms! If you crush the fruit or the tennis ball, either get a rubber ball or go on to a more vigorous exercise to reduce your stress!

5. **Progressive relaxation**

Is especially beneficial when stress keeps your from getting a good night's sleep. Start at your toes and "tell" them to relax. When you feel them relaxing move to your feet, ankles, calf muscles, knees, thighs and so on up your torso to your shoulders and finally to the top of your head or alternatively down through your arms to your fingertips (if you make it that far before you're asleep)

6. Dance

Join an aerobics class, a tai chi class or just turn on the tunes and dance. Dancing has a double advantage in that along with exercise, music is a great stress reducer.

FAMILY STRESS MANAGEMENT 28

Bills, kids, household chores, spousal relationships... all can cause family stress. In addition to day-today stressors, crises like a fire or a death within the family place maximum stress on family relationships. However, learning to cope with daily family stress strengthens your family and makes it easier to cope with family crisis as well.

• The Strong Family Unit

Especially these days when both partners in a family have careers and children are involved in diverse extra-curricular activities, it's very easy for the family unit to break down, resulting in a number of separate individuals living under one roof. Each individual becomes isolated, facing his/her own problems and left to solve them on their own. Abraham Lincoln said, "A house divided against itself cannot stand." Although he was talking about the US in time of Civil War, for families his statement is literally true. Unfortunately, stress for one member of a family stresses and often divides the entire family. When one part is stressed, the whole unit can collapse. The solution is to work through problems as a family, but for the solution to be effective, the family unit needs to be strong.

• Take Time for the Family

Family togetherness doesn't mean constantly holding hands. Neither does it mean that if Jimmy and Dad like football, Mom and Suzy have to like it, too. The phrase "quality time" has become trite with overuse, but it is quality time spent together that reduces daily family stress and builds strong families that can weather both small storms and large crises.

1. Working at household chores together

Completing simple household chores as a family has several advantages. Doing dishes, raking the yard, spring cleaning, or holding a garage sale offers the family time to communicate, lightens the load for individual family members and lets individuals build skills and self-esteem.

2. Share a meal. Share at least one meal each day

Albeit, dinner time these days is often hectic with individuals having conflicting work and activity schedules. If this is true in your family, start having family breakfasts. Mealtime is a great time to

Newsletter

Gaware et al.

tune into individual schedules and plan family activities. If you can't do it every day, schedule it as a regular family "event".

3. The family "event"

A special activity can be as complex as a family vacation or as simple as, a trip to the local park or just a family movie night. Plan the activity as a family and make the activity an "event" where each member contributes to making it a successful and enjoyable occasion. (Simple Example-Family Movie Night - Make a list of movies that you all want to see. Then, choose one of them scheduling a specific night and time for the event. That night, Mom washes the dishes, Jimmy wipes, Suzy pops the popcorn and Dad goes to pick up the movie.)

• Managing Family Stress

A strong family unit develops the tools to solve stressors, reducing stress for the entire family. Problems that stress families may be either individual stressors that carry over to the whole family such as school suspensions, addictions, mental disorders, or physical illnesses or family crises such as a death in the family, financial problems, tornado or fire.

When managing individual stressors that affect the family, keep a few tips in mind:

1. Don't avoid discussion

If it's a problem for you or a problem that you notice is causing stress in another family member, chances are it's a stressor for the entire family as well. Talk it out and work towards finding a solution.

2. Don't trivialize

Whether the problem is as significant as a spouse losing a job or as unimportant to you as the death of your daughter's pet frog, the problem is a stressor for the individual that can ultimately cause stress for the family. Let the individual talk it out, be a good listener and show them that solving the problem is important to the family.

3. Don't lay blame

When there's a problem it really doesn't matter who's at fault. Define the problem and work towards a solution.

4. Respect privacy

If a family member brings a problem to you in confidence, respect it. Don't air it for discussion without their agreement. If you are unable to agree to keep the confidence, be honest in your refusal. For instance, often parents reach decisions about children together. If a child says, "But, don't tell Dad," your response might be, "I'm sorry, but Dad and I don't keep secrets. He needs to know about this.

BENEFITS OF STRESS MANAGEMENT 29

Ideally, stress management needs to begin when we're young so that we don't have battered, scarred trunks when we reach mid life and beyond. But, the reality is, most of us never consider stress as damaging until we've been reacting to it for a long time. The good news about our amazing bodies is that once we identify the stressors and make some definite life style changes, we can often reverse a lot of the damage. Sort of like being able to get some wood filler, apply it to the nicks on the tree trunk, then sand it down to recreate a smooth finish on your trunk. Stress management can really promote better health.

The Benefits of Stress Reduction

- Better immune function
- Less illnesses and physical complaints
- More energy

Newsletter

- Feeling more relaxed
- Sleeping better
- Better digestion
- Calmer mood
- More focused, more positive

Conclusion

Stress is very common, use stress in a positive way and use it to improve your performance. Stress can be caused by positive or negative events. By learning how to identify the stress factors in our life and strategies to cope with these factors we take control of our life. The basic points to remember are be aware of the symptoms of stress identify the source of our stress and choose a strategy to control our stress. Knowing how to control stress will improve the quality of our life as a learner, parent/family member, or worker. Good management is stress management.

References

- 1. Linden W, Lenz JW, Con AH. Individualized stress management for primary hypertension: a randomized trial. Arch Int Med 2001; 161: 1071–80.
- Glavas, M.M.; Weinberg, J. "Stress, Alcohol Consumption and the Hypothalamic-Pituitary-Adrenal Axis". In Yehuda, S.; Mostofsky, D.I.. Nutrients, Stress and Medical Disorders. Totowa, NJ: Humana Press. 2006, 165–183.
- 3. Rosenthal R. Writing meta-analytic reviews. Psychol Bull 1995;118: 183–92.
- 4. Linden W. Autogenic training: a practitioner's guide. New York: Guilford Press, 1990.
- 5. Rutledge JC, Hyson DA, Garduno D, Cort DA, Paumer L, Kappagoda CT. Lifestyle modification program in management of patients with coronary artery disease: the clinical experience in a tertiary care hospital. J Cardiopulm Rehabil 1999; 19:226–34.
- 6. Linden W, Wen FK. Therapy outcome research, health care policy and the continuing lack of accumulated knowledge. Prof Psychol Res Pract 1990; 21:482–8.
- 7. Truby, William. "Stress Test", Stress Test self assessment, December, 2009.
- 8. Keil, R.M.K.Coping and stress: a conceptual analysis Journal of Advanced Nursing, 2004, 45(6), 659–665
- 9. Viner, RPutting Stress in Life: Hans Selye and the Making of Stress Theory. Social Studies of Science, 1999, 29: 3: 391–410
- 10. Holmes, T.H. and Rahe, R.H. The social readjustments rating scales. Journal of Psychosomatic Research , 1967, 11:213–218.
- 11. Ehlers A, Stangier U, Gieler U. Treatment of atopic dermatitis: a comparison of psychological and dermatological approaches to relapse prevention. J Consult Clin Psychol 1995; 63:624–35.
- 12. Newton T. Managing stress: emotion and power at work. Thousand Oaks (CA): Sage Publications, 1995.
- 13. Barnett, S.A. Enigmathic death due to 'social stress'. A problem in the strategy of research. Interdisciplinary Science Re6iews, 1988, 13, 40–51.
- 14. Cobb, S. Social support as a moderator of life stress. Psychosomatic Medicine, 1976, 38, 300-314.
- 15. Henry, J.P. The relation of social to biological processes in disease. Social Sciences and Medicine, 1982, 16, 369–380.

Pharmacologyonline 2: 1319-1334 (2011) Newsletter Gaware *et al.*

- 16. DR. Kathika Chatterjee (Reader, Bakson's), www.similima.com, Stress & Its Management, 1-23.
- 17. The Stress of Life, Hans Selye, New York: McGraw-Hill, 1956.
- 18. Hans Selye, History of the Stress Concept. Ch. 2 in Leo Goldberger and Shlomo Breznitz Handbook of Stress: Theoretical and Clinical Aspects. Free Press, 1982
- 19. Selye "Confusion and controversy in the stress field". Journal of Human Stress, 1975 1: 37-44.
- 20. Ron de Kloet, E; Joels, M. & Holsboer, F.. "Stress and the brain: from adaptation to disease". Nature Reviews Neuroscience, 2005 6 (6): 463–475.
- 21. Tsigos, C. & Chrousos, G.P. Hypothalamic-pituitary-adrenal axis, neuroendocrine factors and stress. Journal of Psychosomatic Research, 2002, 53, 865–871.
- 22. Renew-Stress on the Brain". The Franklin Institute. http://www.fi.edu/learn/brain/stress.html.
- 23. Davis et al. Prenatal Exposure to Maternal Depression and Cortisol Influences Infant Temperament. Journal of the American Academy of Child & Adolescent Psychiatry, 2007, 46:6: 737.
- 24. Turner L, Linden W, van der Wal R, Schamberger W. Stress management for patients with heart disease: a pilot study. Heart Lung 1995; 24:145–53.
- Parker JC, Smarr KL, Buckelew SP, Stucky-Ropp RC, Hewett JE, Johnson JC, Wright GE, Irvin WS, Walker SE. Effects of stress management on clinical outcomes in rheumatoid arthritis. Arthritis Rheum 1995;38:1807–18.
- 26. Bond FW, Bunce D. Mediators of change in emotion-focused and problem-focused worksite stress management interventions. J Occup Health Psychol 2000;5:156 –63.
- 27. McCarberg B, Wolf J. Chronic pain management in a health maintenance organization. Clin J Pain 1999;15:50–7.
- 28. Pruitt RH, Bernheim C, Tomlinson JP. Stress management in a military health promotion program: effectiveness and cost efficiency. Mil Med 1991; 156:51-3.
- 29. O'Connor, Heron, Golding, Beveridge & Glover Maternal antenatal anxiety and children's behavioural/emotional problems at 4 years. Br J Psychiatry, 2002, 180:478–9.