

STRESS AND HEALTH PROBLEMS

27.1 Introduction

Radha spends two hours travelling in a crowded bus. The weather outside is hot and dry. In the hurry she has forgotten to pack her lunch for the day. People inside the bus pick up a quarrel with the conductor over a trivial issue. The bus is running behind the schedule time. By the time Radha reaches her destination, she is feeling tired, hot, irritable, depressed and dizzy.

It is now well known that people of modern age suffer greatly from disorders of stress. Stress is basic to life—no matter how wealthy, powerful, good looking, or happy you might be. Not all stress results in health problems. Mild stress can be stimulating, motivating, and sometimes even desirable. But, as it becomes more severe, stress can bring on physical, psychological, and behavioural problems. In this lesson we will read about how stress leads to health problems.

27.2 Objectives

After reading this lesson, you will be able to :

- outline the different types of health problems due to stress;
- outline the stress and its impact on immune and nervous system;
- prevent and manage health problems due to stress.

27.3 Peter is waiting in a room full of fresh graduates to be interviewed for a job in a well reputed company. His academic performance is not

outstanding but he hopes to get the job through some luck and by his personality. He feels that his parents and his sister must be expecting him to get this high-prestige, high-paying position. He is very nervous. His mouth is dry, his stomach feels tight, his heart is pounding and perspiration has begun to soak through his new suit.

Stressors are events and situations (such as bus rides or interviews) to which people must react.

Stress reactions are the physical, psychological and behavioural responses (such as nausea, nervousness and fatigue) people display in the face of stressors.

Mediating factors such as the circumstances in which stressors occur, and each person's characteristics, make people more or less sensitive to stressors and to stress responses.

Try it yourself

Think about and write down the frequently experienced stressors in your life and what type of stress reactions do you show/display ?

Stressors	Reactions
_____	_____
_____	_____
_____	_____
_____	_____

27.3.1 Stressors

Stress is caused due to some situation or emotional state. These stress causing events are known as stressors. Let us see some of the common stressors that people experience. These stressors are perceived as mild and motivating for some and moderately or severely stressful for others. The common stressors are as follows :

1. Boredom, loneliness
2. Frustration
3. Conflicts
4. Pressures to meet dead lines
5. Competitions
6. Increased responsibilities
7. Exertion due to travel or any physical/mental work
8. Divorce, separation and death of loved ones

9. Trouble in interpersonal relations such as parents, in-laws, friends, boss, servants etc.
10. Loss of one's self-prestige, image or status
11. Losses in one's profession or studies or business etc.
12. Retirement
13. Lack of freedom and privacy
14. Sexual difficulties and guilt feelings
15. Changes in financial status
16. Change of residence
17. Payment of loans

Everybody experiences stress in some or the other way at home or at work place. Similarly stress tolerance is different in individuals and one thing should be kept in mind that we can always reduce the stress. Stress can act as a promoter of self-understanding. We don't actually know what we can do, unless we have to do it. For eg. Each time we clear a subject in exam, we gain self-confidence that we can also pass through this situation. Sometimes experiences of disappointments and failures become blessings in disguise because we realise that we were pursuing the wrong goals or the task came to us so suddenly that we were not ready for it.

With too little stress we become lazy and with too much we become tense and prone to illness. We should know how to manage and handle the stress in some manner so that we can make most out of the situation.

27.4 Changes due to Stress

- 1) Santhil, a young unemployed is lonely at home most of the time. He often dreams about good things in life and the need to achieve them. But till now he is not able to get good job. Previously, he had worked in a small company, but left it as there were problems with his boss and himself. Santhil feels depressed, unworthy and irritable most of the time. To overcome loneliness and depression, he has taken to drinking habit.
- 2) Sitha is a good student. She always wants to excel in the class. Her parents and teachers expect a lot from her. Due to a high fever which she caught during the weekend holiday, she is not able to complete the given assignment on time. As the last date is fast approaching, Sitha feels guilty, anxious and is not able to concentrate on the assignment.

In both of the above examples changes (physical and mental) can be seen which is because of stress.

Physiological Changes

Stress can induce certain physiological or bodily changes. They may include the following :

- a) muscle tension
- b) elevated blood pressure
- c) rapid heart beat
- d) nausea
- e) dizziness
- f) profuse sweating
- g) headaches
- h) heart diseases etc.

Emotional Changes

Stress can induce emotional changes too. Some of them are :

- a) anxiety
- b) depression
- c) frustration
- d) hopelessness
- e) irritability
- f) intense anger

Cognitive changes

Changes observed in cognitive areas due to stress are :

- a) distraction
- b) decreased concentration
- c) memory problems like often forgetting important details.
- d) sleep disturbances like inability to fall asleep or when awakened, finding it difficult to fall asleep again.
- e) often unpleasant thoughts etc.

Behavioural Changes

And finally certain behavioural changes can also take place. They may include the following :

- a) over-eating
- b) use of excessive alcohol or drug consumption etc.

These changes can occur simultaneously in any combination at any given point when the individual is undergoing stress.

Do it yourself exercise :

Given below are some items from the revised version of the daily hassles (trouble) and uplifts (pleasers) scale. The respondent is asked to give bedtime ratings (on 0-4) scales of the degree to which each item was a trouble or an uplift that day. Ratings over several days or weeks can give a picture of your stressors and pleasures and may allow for a better understanding of the role of daily hassles.

How much was this item a trouble for you today ?		How much was this item pleasure for you today ?
0 1 2 3 4	Your child (ren)	0 1 2 3 4
0 1 2 3 4	Time with family	0 1 2 3 4
0 1 2 3 4	Fellow workers	0 1 2 3 4
0 1 2 3 4	Your work hard	0 1 2 3 4
0 1 2 3 4	Meeting dead lines	0 1 2 3 4
0 1 2 3 4	Having enough money	0 1 2 3 4
0 1 2 3 4	The weather	0 1 2 3 4
0 1 2 3 4	Cooking	0 1 2 3 4
0 1 2 3 4	Home entertainment	0 1 2 3 4
0 1 2 3 4	Amount of free time	0 1 2 3 4

Now you can identify your own stressors and add to the list above. Continue to do the ratings as done previously.

27.5 Stress and its impact on health

Indications are found that 75% of human diseases are due to stress. During stressful period, anxiety and nervousness are common symptoms. When these become intense and habitual phobia develops. A phobia refers to irrational fear over an object, person, or an animal or situations. The person feels unduly anxious when he/she comes across a phobia situation and hence always tries to avoid them. Some of the common phobias are :

1. Social phobia—fear of addressing to public audience eg. Stage fear
2. Claustrophobia—fear of closed places.

Anxiety refers to a vague unpleasant feeling of impending threat and danger. A person with several anxieties will always be worried, unclear, confused in thinking, indecisive etc. Sometimes excessive anxiety leads to speech problems like stuttering and stammering, urinary problems like bedwetting as commonly seen among children.

27.6 Stress and the Immune System

We are constantly exposed to various germs and viruses but we do not fall ill. This is because we have got a protective machine inside our body which is called the immune system. But stress can weaken this immune system also which can make us victim of many diseases. If the stress is for a shorter period there is no much damage, but if the stress prolongs, it results in serious illness as cancer, heart disease, headache, asthma and peptic ulcer. It is found that individuals under stress are more likely to catch cold than individuals who are not under stress. This is attributed to the fact that intense stress reduces body's immune system, thus making the person easily infected.

27.7 Stress and Health Problems

It is an accepted fact that certain cardiac problems like hypertension and heartaches are caused due to emotional strain the person undergoes. Such emotional stress caused may be due to frustration, intense anger, fear, depression or shock.

Eating disorders can also be caused due to preoccupation with stressful situations. Sleep disorders can also occur due to stress. Sleep disorders may be difficulty in going to sleep or disturbed sleep or not getting sleep at all (insomnia). A person who is said to experience frequently intense emotions such as anger, jealousy, hatred, fear, panic often complain about ulcer problems too. In fact intense fear or guilt can lead to some of the sexual problems.

The most common stress related health problems are cold and tension headache. Scientists say that there is no specific medicine for common cold and tension headache. These problems are when the individual is undergoing stressful experiences but may vanish under pleasant and happy occasion. Pills for killing pain and cold give temporary relief. Hence it is necessary to know the root cause of the stress for permanent solution for these health problems. For eg. a student might get headache whenever he is asked to give a test/exam.

Psychosomatic diseases like peptic-ulcer, asthma, essential hypertension (high BP) are also due to stress. You would have known that many die due to heart attack at a young age. Those are Mr. victims of stress.

The combination of repeated stress and the weakness of a particular system leads to psychosomatic diseases, for eg. a person gets ulcer, when under stress and his stomach (digestive system) becomes weak. These people also do not express their emotion outwardly. For eg. if a person gets angry he must show it out in an appropriate way but if he keeps within himself repeatedly, he is likely to get ulcer. We should be asked to learn the proper means and ways of expressing our emotions

outwardly for maintaining the good health.

Intext Questions 27.1

1. Match the following :

(a) Immune System	(i) stress disorder
(b) Peptic Ulcer	(ii) Protects from diseases
(c) Tension Headache	(iii) Speech disorder
(d) Stammering	(iv) Psychosomatic disorder
2. List out the occasions when you get headaches.

The above mentioned are some of the commonly reported clinical stress related problems. These problems are experienced by the individual either mildly or to moderate levels. A less often occurring, severe disorder is known as post-traumatic stress disorder. The symptoms include anxiety, apprehension, chronic tension, sleep disorders like insomnia or sleepless nights, nightmares, withdrawal behaviour etc. This disorder occurs when the person experiences severe stress after a traumatic life threatening experience like accidents, being victimized either physically and mentally as in rape or sexual harassment, death of near ones etc.

E. Stress Relief: In many severe cases of experience of intense stress, then the individual must consult the psychologist for immediate help or be institutionalized for the necessary period of time. Mild to moderate stress can be easily relieved if one does regular physical exercise, by doing progressive relaxation, meditation, by thinking positively, seeking social activities which are relaxing and pleasurable or following certain management techniques like time - management, stress - reduction programmes etc. Medication such as..... stress drugs must be used only in severe cases and with medical supervision.

Intext question 27.2

- a. Answer to the following as either true or false
 1. Urinary disorders like bedwetting occur only due to stress.
True/False
 2. Stuttering and stage fear mainly occurs due to anxiety and nervousness.
True/ False
-

3. Impotency and frigidity can occur due to both organic as well as psychological disturbances. True/ False
 4. Severe stress reaction individuals need not seek institutional help. True/False
 5. Common cold generally occurs due to reduced immune system that is constantly exposed to stressprone situations. True/False
- b. Mention some of the health disorders (both physical and mental) that are caused due to stress.
 - c. In what way can one overcome everyday stress problems ?
 - d. What is meant by post-traumatic stress disorders ?

What you have learnt

- ★ Stress occurs in every day living for every one of us.
- ★ Stress can be mild, moderate or severe.
- ★ Stress is defined as non-specific reaction by the organism to demands made on it.
- ★ Not all stress reactions lead to disorders.
- ★ Mild stress can produce stimulation and motivation for the organism.
- ★ Stress can bring about physical, psychological and behavioural changes in the organism.
- ★ It can also affect one's mental and physical health too.
- ★ Some of the common stressors are boredom, physical exertion, losses, frustrations, conflicts, meeting dead lines, intense noise, etc.
- ★ Some of the symptoms or reactions of stress are muscular tension, body pain, increased heart beat, dizziness, nausea, sweating, inability to relax, depression, destructibility and withdrawal, etc.
- ★ Some of the common stress related disorders are stuttering, stammering, bed-wetting, stage fears, depression, phobia, heart attacks, hysterias and.....problems.
- ★ Ways to combat stress are to do physical exercise, meditation, doing pleasurable activities, seeking professional help and following stress relieving management programmes like time management, learning to think positively, etc.

Terminal Questions

1. Define the terms Stress, Stressors and Stress reactions with suitable examples.
2. Write a short note on the various stressors that you see.

Key to Intext Questions

27.1

- (a) (ii)
- (b) (i)
- (c) (iv)
- (d) (iii)

27.2

1. False (It can also occur due to organic causes but generally occur due to stress also).
2. True
3. True
4. False (unless they seek professional help, such individuals may be a problem to themselves as well as to others).
5. False.

Hints to Terminal Questions

1. Refer section 27.3 and 27.4
2. Refer section 27.3