**UNIT 9.**

**STRESS AND CRISIS**

**9.2 Causes and effects of stress**

Stress is a fact of life and affect individuals in variety of ways. Stress can be manifested from any situation or thought that causes an individual to experience frustration, anger and nervousness, where as anxiety is a feeling of fear and apprehension.

Everyone has different stress triggers; being unhappy in job, having poor management, unclear expectations of own work, facing discrimination or harassment at work, death of loved one, getting married, divorce , relocation, chronic injury and traumatic events are the events causing stress to life.

The causes of stress can be divided as following.

1. Physical causes

2. Cognitive/ Psychological causes

3. spiritual causes

4. Sociocultural causes

5. Ecological causes

6. Occupational causes

1. **Physical causes:**

Externalphysical factors such as: poison, heat, cold, radiation, electricity, high low atmospheric pressure, drugs,etc.which may be injuries to health. Internal physical symptoms such as headache, stomach problems,etc. Are internal stressors.

1. **Psychological causes:**

Psychological stress refers to all processes, whether origination in external environment or within the person. Psychological factors first affect the brain and Central Nervous System. The cause and effects of psychological stress vary with age. Fear of increasing responsibility, death of parent, fear of bodily harm,etc. are some examples.

1. **Spiritual causes**

Neglect of spiritual needs contributes to higher levels of stress and impairments. Stress arises when basic spiritual values or beliefs are reformulated.

1. **Socio- cultural factors**

Environmental and social stressors can lead to developmental problems. Potential stressors that could affect any age group, but that are especially stressful for young people, include prolonged poverty, and physical handicap.

Children are vulnerable when relationship with parents and care givers are lost through divorce, imprisonment or death or when parents have mental illness or substance abuse disorder.

1. **Ecological factors**

Ecology is defined as the branch of biology dealing with mutual relationship between organisms and their environment. For example, war can cause imbalance to the environment. War and disease are closely linked. War may cause epidemic disease e.g. cholera, plague etc.

1. **Occupational factors**

Occupational factors can arise from job, some occupations are more stressful than others. Stressful job changes can include promotions, transfer, downsizing, changes in supervisors and additional responsibilities. But response to the pressure and problems of the job is depend upon individuals.

**EFFECTS OF STRESS**

Effects of stress on body system

1. **[ENDOCRINE SYSTEM](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "11)**

* [The](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "11)Brain-

-The Hypothalamus signals the pituitary gland to started to produce epinephrine and cortisol, the "stress hormones“ and signals the ANS

* Adrenal Glands (near kidneys)

-Produces cortisol and epinephrine – starts the process that gives the body the energy to run from danger.

* Liver

- the liver produces more glucose,

-If body doesn't use all of that extra energy, it is able to reabsorb the blood sugar, even if individual is stressed again and again.

- People vulnerable to Type 2 diabetes — that extra blood sugar can lead to diabetes.

-PR. Ashalatha, G. Deepa, (2022), “Textbook of Applied anatomy and Physiology for Nurses”

1. **[DIGESTIVE SYSTEM](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "12)**

[-Eating much](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "12)more or much less than usual

* Esophagus

– Eating more or different foods

– increased ingestion of alcohol or tobacco,

– heartburn or acid reflux.

– Stress or exhaustion increase the severity of heartburn

* Stomach

– Brain becomes more alert to sensations in the stomach.

– “Butterflies" , nausea or colicky pain

– Vomiting

– Ulcers or severe stomach pain even without ulcers

* Bowel

– Stress can affect digestion, and the nutrients absorbed

– Affect how fast food moves through the intestines

– diarrhea or constipation

– IBS worsened

1. **[MALE REPRODUCTIVE SYSTEM](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "13)**

**[•](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "13)**The parasympathetic part of the nervous system causes relaxation whereas the sympathetic part causes arousal.

• The ANS produces testosterone

• Excess amounts of cortisol affects the normal biochemical functioning of the male reproductive system

• Chronic stress can:

– Decrease testosterone production

– sperm production and maturation

– decreased libido

– erectile dysfunction or impotence

– infections (due to lowered immunity) of the testes, prostate gland and urethra, can affect normal male reproductive functioning

1. **[FEMALE REPRODUCTIVE SYSTEM](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "14)**

**[•](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "14)** Menstruation

– absent or irregular menstrual cycles

– more painful periods

– changes in the length of cycles

• Decreased libido

• Decreased fertility and problems during pregnancy

• Premenstrual Syndrome (PMS)

– symptoms may be worsened or more difficult to cope

– Include cramping, fluid retention and bloating, negative mood (feeling irritable and "blue") and mood swings

• Menopause

– hormone levels fluctuate rapidly.

– anxiety, mood swings and feelings of distress

– hot flushes, increased number and/or more severe or intense

1. **[RESPIRATORY SYSTEM](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "15)**

**[•](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "15)** [Breathing](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "15)made faster in an effort to quickly distribute oxygen-rich blood • In preexisiting asthma or emphysema - may be even more difficult to breathe

• Rapid breathing — or hyperventilation

1. **[CARDIOVASCULAR SYSTEM](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "16)**

**[•](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "16)** [The](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "16)heart also pumps faster

• Blood vessels in less important areas constrict and divert more oxygen to the muscles, brain and vital organs

• Raises blood pressure

• frequent or chronic stress

-heart works too hard for too long

• When blood pressure rises, risks for having a stroke or heart attack also may occur.

1. **[MUSCULAR SYSTEM](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "18)**

**[•](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "18)** [Muscles](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "18)tense up to protect themselves from injury

• They tend to release again once stress is gone.

• Chronic stress- muscles may not get the chance to relax

• This causes aches and pains: (headache, back and shoulder pain, body aches

• Over time, this can set off an unhealthy cycle as person stops exercising

• Stress may make Rheumatic Arthritis worse.

1. . **[IMMUNE SYSTEM](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "19)**

**[•](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "19)** [Acute](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "19)stress stimulates the immune system

• Helpful for immediate situations

• can help you avoid infections and heal wounds

• Chronic stress weakens the immune system

• Reduce the body’s response to foreign invaders

• Increased susceptibility to viral illnesses like the flu, common cold, other infections- even cancer

• Increases the time taken to recover from illness or injury

1. **[THE SKIN](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "20)**

[Chronic stress](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "20)can worsen

• Allergies

• Acne

• Eczema

• Psoriasis

-https://www.slideshare.net

**PHYSICAL EFFECT**

* Headache
* stomachache (Diarrhea or constipation )
* Nausea, dizziness
* Chest pain, palpitation
* Loss of sex drive
* Frequent colds or flu
* Perspiration
* Cold extremities
* Dry mouth
* Blood pressure change

**[BEHAVIORAL EFFECT](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "22)**

* [Eating](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "22)more or less
* Angry outbursts
* Feeling jumpy or tired or irritable
* Loss of concentration
* Sleeping problem
* Withdrawing from others
* Procrastinating or neglecting responsibilities
* Using alcohol, cigarettes, or drugs to relax
* Nervous habits (e.g. nail biting, pacing)
* Burnout
* **[COGNITIVE EFFECTS](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "23)**
* [Memory](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "23)problems
* Inability to concentrate
* Poor judgment
* Seeing only the negative
* Anxious or racing thoughts
* Constant worrying
* Confused
* Insecure
* Forgetfulness
* **[EMOTIONAL EFFECTS](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "24)**
* [Depression](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "24)or general unhappiness
* Anxiety and agitation
* Moodiness, irritability, or anger
* Feeling overwhelmed
* Loneliness and isolation
* Procrastination
* Social withdrawal

**INTELLECTUAL EFFECT**

* Reduce ability to acquire knowledge and skill
* Ineffective communication
* Inability to solve conflicts
* Decrease problem solving ability
* Diminished attention
* Decreased concentration
* Loss of interest
* Poor judgement

**[EFFECT OF STRESS](https://www.slideshare.net/ANUABU1/effects-of-stress-on-body" \l "25)**

ON LIFE Depends on many factors: – Personality – Upbringing – Personal coping skills – Social support