# Development in early and late adulthood
# Unit -3

## (B) CHANGES IN MEN AND WOMEN.

## Physical Changes

**The vast majority of physical changes observed during late adulthood are closely related to the process of advanced aging. Physical functioning and daily activities are curtailed as the organ systems degenerate. Many of the symptoms of organ degeneration appear prominently in middle adulthood, but they become even more pronounced as people progress through late adulthood.**

**The aging process in late adulthood is termed senescence. The general effects of aging combine to make the body's organ systems work less efficiently. For quite a while, people can compensate for the declining efficiency of their organs and the body in general, but the decline becomes dramatic later in this stage.**

- ## Changes in Height and Weight

**The loss of weight in m en that begins in middle adulthood continues through late adult- hood. Elderly women begin to lose weight in gradual increments during this stage. Decreasing physical activity, less food consumption, lower metabolism, poorer health, and related factors result in a reduction of muscle and tissue mass and hence weight.**

- ## Teeth

**Total loss of teeth occurs in a sizable minority of people between the ages of sixty-five and seventy-four. Advanced age is associated with a higher incidence of periodontal disease and gingivitis, inflammations of gum tissue that contribute highly to tooth loss. Many of the dental problems of old age, however, are the result of earlier neglect.**

**Dental problems contribute to poor eating habits that lead to malnutrition. Some elderly people do not get dentures to replace missing teeth for financial reasons; others have poorly fitting dentures. As a result, they may eat only foods that are easy to chew, eliminating many vegetables, fruits, and meats from their diet.**

- ## Muscular & Skeletal System

**The ability to move about becomes more restricted as aging advances because of changes in muscle and bone functioning. Muscles atrophy, reducing strength and restricting movement. Loss of elasticity in muscle tissue reduces flexibility, causing stiffness. Osteoporosis leads to easier bone breakage, kyphosis ("humpback" posture), and scoliosis (S-curved spinal column). Back pain increases in frequency and intensity, reflecting deterioration of the vertebrae**
**Arthritis and rheumatism are the most prevalent musculoskeletal dis- orders among the elderly. Other conditions that often cause disability or discomfort at this stage are muscle cramps, bursitis in the shoulder or elbow, and gout (a metabolic disorder that results from uric acid crystals forming at joint areas, especially in the feet).**

- ## Cardiovascular System

**The effects of aging on the heart and blood vessels that became increasingly apparent in middle**
**adulthood worsen in late adulthood . There is further accumulation of fatty material in the heart muscle and in the arteries (atherosclerosis), the heart valves thicken, and arteriole- restricted. rosis (hardening of the arteries)**
**becomes more pronounced (Schrier, 1990; Spence & Mason, 1987). These**

**conditions cause higher blood pressure, extra stress on the heart, and related cardiovascular problems, although regular exercise has been found to be beneficial in maintaining cardiovascular responsiveness.**

**Decreased cardiac output further jeopardizes the health and well-being of the elderly (Spence & Mason, 1987). The slower heart rate of older people results in a decreased level of oxygen in the blood, which is why elderly people tire more easily and cannot endure stress as well as younger people.**

- ## Respiratory System

**The lungs have lowered capacity for inhaling and exhaling air in late adulthood (Horan & Brouwer, 1990; Spence & Mason, 1987). There are three causes of this reduced capacity. First, a change in collagen composition of the lungs causes them to become less elastic and thus less capable of expanding and contracting. Second, the diaphragm and chest muscles that help expand and contract the chest weaken. Third, age-related conditions such as scoliosis reduce chest capacity.**

- ## Digestive System

**Digestive problems generally increase through adulthood (Spence & Mason, 1987). In old age, the most commonly reported digestive disorders are constipation, hernia, gallbladder conditions, gastritis (heartburn), and diverticulitis (Drury & Howie, 1979; Whitehead, Drinkwater & Cheskin, 1989).**

**Constipation and haemorrhoids are frequent complaints of the elderly. Their concern with not having a regular daily bowel movement may be more of a matter of socialization than a true effect of aging, however. Of greater concern for many elderly individuals is the high rate of haemorrhoids and the reliance on laxatives to produce regular bowel movements . This often is related more to dietary practices than to the aging process as well. These conditions may be controlled by adding more fibre to the diet in the form of grain bran, fresh fruits, vegetables, and nuts or by taking dietary supplements containing fibre**

- ## Brain & Nervous System

**Several developmental changes in the brain and central nervous system are related to advanced aging (Albert & Killiany, 2001; Spence & Mason, 1987; Vinters, 2001). First, the speed of nerve cell transmission slows with age. Second, brain and nerve cells diminish in number. These two factors, plus decreased transmission of oxygen to the brain, produce the slowing in reaction time that is commonly observed among elderly**

**Reduced availability of oxygen to the brain can contribute to other conditions that are troublesome to elderly individuals. Sleep disturbances, memory difficulties, and general irritability are related to decreased cerebral blood flow and to changes in the biochemical functioning of the brain in old age (Pollak, Perlick & Linsner, 1990). Insomnia is a frequent complaint among the elderly (Cassel, 1990). There is a general trend to need less sleep as age increases. A newborn infant may sleep about sixteen hours daily, whereas school-age children sleep about ten hours, and adults about eight. Elderly people may be able to sleep only five hours or so a night.**

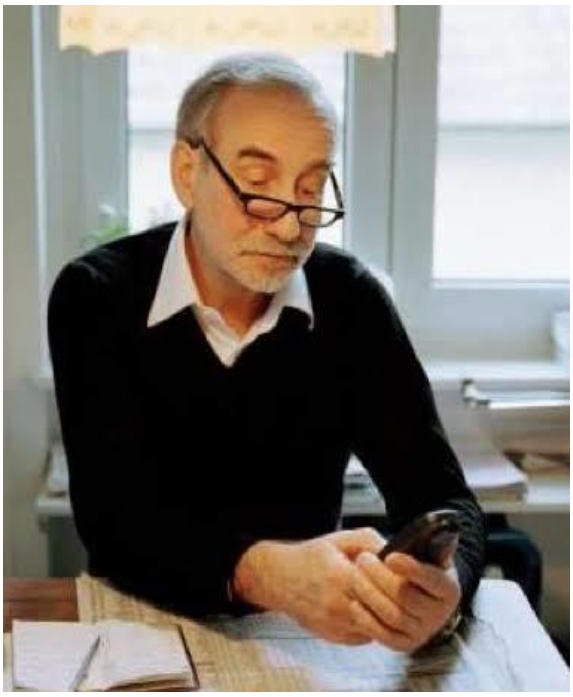
# CHANGES IN SENSATION, PERCEPTION, AND MOTOR SKILLS

**The ability to adjust and adapt in late adulthood partly depends on the capacity to receive and process information gained through the senses. Elderly people**

**experience sensory deprivation as the sensory organs and the area of the brain that regulate them decline in efficiency. This deprivation has enormous implications for mental alertness and contact with reality.**

- ## Vision

**Age-related changes in vision during late adulthood include an increase in the threshold of light needed to stimulate retinal cells; a decrease in acuity (sharpness of vision) due to changes in the lens, pupil size, and accommodation (focusing ability); and a decrease in adaptation to dark and light environments. The ability to adjust and adapt in late adulthood partly depends on the capacity to receive and process information gained through the senses. Elderly people experience sensory deprivation as the sensory organs and the area of the brain that regulate them decline in efficiency. This deprivation has enormous implications for mental alertness and contact with reality.**



- ## Taste and smell

**Taste and smell perception decline in old age. Many elderly people remark that food tastes bland, and season it heavily with salt, pepper, and other condiments to**

**improve its flavour. This loss of taste is attributed to a decrease in the number of taste buds and to the need for stronger stimulation to taste receptors in the mouth. People do not smell odours as well in late adulthood. This is because of a decrease in the number of nerve fibres in the nose (Saxon & Etten, 1978; Spence & Mason, 1987). This decline has important safety implications. Elderly people sometimes cannot easily smell food that has burned during cooking or smoke from a house fire**

- ## Hearing

**Perhaps the most significant sensory changes during the late adulthood is hearing loss. It sometimes leads to a complete withdrawal from social interaction. Hearing handicaps increase considerably with age. About half of all people older than 65 have some hearing loss. These losses occur earlier in men than women, perhaps because men were more likely to be exposed to hazardous noise on the job.**

# Cognitive Changes in Late Adulthood

**Cognitive abilities such as memory may see a decline in late adulthood.**

**As an individual ages into late adulthood, psychological and cognitive changes can sometimes occur. A general decline in memory is very common, due to the decrease in speed of encoding, storage, and retrieval of information. This can cause problems with short-term memory retention and with the ability to learn new information. In most cases, this absent-mindedness should be considered a natural part of growing older rather than a psychological or neurological disorder.**

**Distinct from a normal decline in memory is dementia, a broad category of brain diseases that cause a gradual long-term decrease in the ability to think and remember to the extent that a person's daily functioning is affected. While the term "dementia" is still often used in lay situations, in the DSM-5 it has been renamed "neurocognitive disorder," with various degrees of severity.**

**Alzheimer's disease is the most common type of neurocognitive disorder, accounting for 50% to 70% of cases. Neurocognitive disorders most commonly affect memory, visual-spatial ability, language, attention, and executive function (e.g., judgment and problem-solving). Most of these disorders are slow and progressive; by the time a person shows signs of the disease, the changes in their brain have already been happening for a long time.**

# Socio emotional Changes in Late Adulthood

**Growing older means confronting many psychological, emotional, and social issues that come with entering the last phase of life.**

**As people approach the end of life, changes occur and special challenges arise. Growing older means confronting many psychological, emotional, and social issues that come with entering the last phase of life.**

- ## Increased Dependency

- **As people age, they become more dependent on others. Many elderly people need assistance in meeting daily needs as they age, and over time they may become dependent on caregivers such as family members, relatives, friends, health professionals, or employees of senior housing or nursing care. Many older adults spend their later years in assisted living facilities or nursing homes, which can have social and emotional impacts on their well-being. Older adults may struggle with feelings of guilt, shame, or depression because of their increased dependency, especially in societies where caring for the elderly is viewed as a burden. If an elderly person has to move away from friends, community, their home, or other familiar aspects of their life in order to enter a nursing home, they may experience isolation, depression, or loneliness.**

- **Loneliness and Connection**

**A central aspect of positive aging is believed to be social connectedness and social support. As we get older, socio emotional selectivity theory suggests that our social support and friendships dwindle in number, but remain as close as, if not closer than, in our earlier years (Carstensen, 1992). Many older adults contend with feelings of loneliness as their loves ones, partners, or friends pass away or as their children or other family members move away and live their own lives. Loneliness and isolation can have detrimental effects on health and psychological well-being. However, many adults counteract loneliness by having active social lives, living in retirement communities, or participating in positive hobbies. Staying active and involved in life counteracts loneliness and helps increase feelings of self-esteem and self-worth.**

- **Confronting Death**

**People perceive death, whether their own or that of others, based on the values of their culture. People tend to have strong resistance to the idea of their own death and strong emotional reactions of loss to the death of loved ones. Viewing death as a loss, as opposed to a natural or tranquil transition, is often considered normal**

**Elisabeth Kübler-Ross (1969), described in her theory of grief the process of an individual accepting their own death. She proposed five stages of grief in what became known as the Kübler-Ross model: *denial, anger, bargaining, depression,* and *acceptance.***

- ***Denial*: People believe there must be some mistake. They pretend death isn't happening, perhaps live life as if nothing is wrong, or even tell people things are fine. Underneath this facade, however, is a great deal of fear and other emotions.**
- ***Anger*: After people start to realize death is imminent, they become angry. They believe life is unfair and usually blame others (such as a higher power or doctors) for the state of being they are experiencing.**
- ***Bargaining*: Once anger subsides, fear sets in again. Now, however, people plead with life or a higher power to give them more time, to let them accomplish just one more goal, or for some other request.**
- ***Depression*: The realization that death is near sets in, and people become extremely sad. They may isolate themselves, contemplate suicide, or otherwise refuse to live life. Motivation is gone and the will to live disappears.**

- ***Acceptance*: People realize that all forms of life, including the self, come to an end, and they accept that life is ending. They make peace with others around them, and they make the most of the time they have remaining.**

**While most individuals experience these stages, not all people go through every stage. The stages are not necessarily linear, and may occur in different orders or reoccur throughout the grief process. Some psychologists believe that the more a dying person fights death, the more likely they are to remain stuck in the denial phase, making it difficult for the dying person to face death with dignity. However, other psychologists believe that not facing death until the very end is an adaptive coping mechanism for some people.**