Master of Arts

(Psychology)

Development Psychology 2

Semester-II

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Learning Outcomes

Unit I

- Explain the impact of lifestyle factors, such as exercise and nutrition, on physical health and functioning.
- Evaluate the relationship between psychomotor functioning and cognitive abilities in adulthood.
- Identify common health challenges and concerns in adulthood.
- Explore preventive measures and lifestyle choices that contribute to overall well-being in adulthood.
- Analyze the role of healthcare systems in supporting adults' health and addressing age-related health issues.

Unit II

- Identify and describe the key developmental tasks associated with middle age.
- Analyze the psychological and social dimensions of developmental tasks in middle adulthood.
- Evaluate the impact of societal expectations and cultural factors on the fulfillment of developmental tasks.
- Analyze the impact of aging on sensory functions, such as vision, hearing, and proprioception.

Unit III

- Examine shifts in personal interests and work priorities during middle age.
- Analyze the impact of changing career aspirations and professional goals on personal fulfillment.
- Develop strategies for maintaining work-life balance and pursuing meaningful interests during middle adulthood.

Unit IV

- Describe typical physical changes occurring during old age, including changes in muscle mass, bone density, and mobility.
- Analyze the impact of aging on sensory functions, such as vision, hearing, and proprioception.
- Assess psychomotor functioning in old age and its connection to overall physical health and well-being.

Unit V

- Analyze the impact of societal attitudes and policies on the well-being of older adults.
- Develop strategies for promoting social inclusion, community engagement, and addressing social challenges associated with aging.
- Analyze the factors influencing the quality and nature of these relationships, including communication, support, and interdependence.
- Develop interpersonal skills for maintaining positive and meaningful connections with various social circles during late adulthood.

DEVELOPMENTAL PSYCHOLOGY – II

SYLLABUS

UNIT I

EARLY ADULTHOOD

Introduction to Early Adulthood, Characteristics of Early Adulthood, Developmental Tasks of Early Adulthood, Highlights of Physical, Cognitive, and Psychological Developments / Aids to Mastery of Developmental Tasks, Changes in Brain of Young Adulthood, Adjustment in Various Aspects, Physical Development, Health in Adulthood, Intellectual Development, Parenting, Cognitive Development in Early Adulthood

UNIT II

MIDDLE ADULTHOOD

Introduction to Middle Adulthood, Developmental Tasks of Middle Age, Characteristics of Middle Adulthood, Physical Changes, Sensory Changes, Health Concerns, Intellectual Development

UNIT III

MIDDLE AGE HAZARDS

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UNIT IV

OLD AGE

Introduction to old age, Characteristics of Old Age, Development in Late Adulthood, Sensory Changes in Old Age, Intelligence and Memory, Health in Old Age, Physical Development Psychological Hazards

UNIT V

HAZARDS OF OLD AGE

Social Issues Related to Aging, Vocational and Family Hazards of Old Age, Relationships in old age, Work and Retirement, Living Arrangements for The Elderly, Death: Facing Death & Three Aspects of Death

UNIT I

EARLY ADULTHOOD

STRUCTURE

NOTES 

1.1 LEARNING OBJECTIVE

- Understand Early Adulthood.
- Understand the Characteristics of Early Adulthood.
- Understand the Developmental Tasks of Early Adulthood.
- Understand the Highlights of Physical, Cognitive, and Psychological Developments. /Aids to Mastery of Developmental Tasks.
- Understand the Changes in the Brain of Young Adulthood.
- Understand the Adjustment in Various Aspects.
- Understand the Physical Development.
- Understand the Health in Adulthood.
- Understand Intellectual Development.
- Understand the Cognitive Development in Early Adulthood.

1.2 INTRODUCTION TO EARLY ADULTHOOD

By the time we reach early adulthood, our physical maturation is complete, although our height and weight may increase slightly. In early adulthood, our physical abilities are at their peak, including muscle strength, reaction time, sensory abilities, and cardiac functioning. Most professional athletes are at the top of their game during this stage, and many women have children in the early adulthood years. The aging process, although not overt, begins during early adulthood. Around the age of 30, many changes begin to occur in different parts of the body. For example, the lens of the eye starts to stiffen and thicken, resulting in changes in vision (usually affecting the ability to focus on close objects). Sensitivity to sound decreases; this happens twice as quickly for men as for women. Hair can start to thin and become gray around the age of 35, although this may happen earlier for some individuals and later for others. The skin becomes drier and wrinkles start to appear by the end of early adulthood. The immune system becomes less adept at fighting off illness, and reproductive capacity starts to decline.

1.3 CHARACTERISTICS OF EARLY ADULTHOOD

Some of the outstanding characteristics of the years of young adulthood are:

1. Young adulthood is the "**Settling-down Age**" It has been said that childhood and adolescence are the periods of "growing up" and that adulthood is the time for "settling down." That meant settling into a line of work that would be the man's career for the rest of his life, while the young woman was expected to assume the responsibilities of homemaker and mother-responsibilities that would be hers for the remainder of her life.
2. Young adulthood is the "**Reproductive Age**" Parenthood is one of the most important roles in the lives of most young adults. Those who were married during the latter years of adolescence concentrate on the role of parenthood during their twenties and early thirties, some become grandparents before young adulthood ends. Those who do not marry until they have completed their education or have started their life careers do not become parents until they feel they can afford

to have a family. If women want to pursue careers after marriage, they may put off having children until the thirties. For them, then, only the last decade of young adulthood is the "reproductive age." For those who have children early in adulthood or even in closing years of adolescence and have large families, all of young adulthood is likely to be a reproductive age.

3. Young adulthood is a "**Problem Age**" From the beginning of adulthood, the average man of today is preoccupied with problems related to adjustments in the different major areas of adult life. In the years from the beginning of legal adulthood to thirty, most men and women are adjusting to marriage, parenthood, and jobs. In the decade thirty to forty years, adjustments focus more on family relationships because it is an accepted fact that changing jobs or selecting a new vocation after the mid-thirties is difficult if not impossible. Consequently, most men have made their adjustments to their work earlier and are now concentrating on adjustments related to problems of parenthood.
4. Young adulthood is a period of "**Emotional Tension**" When people are trying to get the lay of a new land in which they find themselves, they are likely to be emotionally upset. By the early or mid-thirties, most young adults have solved their problems well enough to become emotionally stable and calm. Should the heightened emotionality characteristic of the early years of adulthood persist into the thirties, it suggests that adjustments to adult life have not been satisfactorily made.
5. Young adulthood is a period of "**Social Isolation**" Those who were most popular during their school and college days, and who devoted much of their time to peer activities, experience loneliness with the end of formal education, entrance into the adult life pattern of work and marriage, associations with the adolescent peer groups, opportunities for social contacts outside the home and when responsibilities at home or at work isolate them from groups of their peers. As a result, for the first time the most popular individual is likely to experience social isolation, or what Erikson has referred to as an "isolation crisis".
6. Young adulthood is a "**Time of Commitments**" As young adults change their role from that of student and dependent adolescent, to that of independent adult, they establish new patterns of living, assume new responsibilities, and make new commitments. While these new patterns of living, new responsibilities, and new commitments may change later, they form the foundations on which later patterns of living, responsibilities, and commitments will be established.
7. Young adulthood is often a "**Period of Dependency**" Many young adults are partially or totally dependent on others for varying lengths of time. This dependency may be on parents; on the educational institution they attend on part or total scholarship, or on the federal government for loans to finance their education.
8. Young adulthood is a "**Time of Value Change**" Many of the values developed during childhood and adolescence change as experience and social contact with people of different ages broaden and as values are considered from a more mature standpoint. Adults who used to consider school a necessary evil may now recognize the value of education as a stepping-stone to social and vocational success and to personal fulfillment.

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9. Young adulthood is the "**Time of Adjustment to New Lifestyles**" Of the many adjustments young adults must make to new lifestyles the most common are adjustments to egalitarian rather than traditional sex roles, new family-life patterns, including divorce and one parent families, and new vocational patterns, especially large and in personal work units in business and industry.
10. Young adulthood is a "**Creative Age**" Unlike older children and adolescents who want to conform to the appearance, behavior, and speech of their age-mates for fear of being regarded as "inferior," many young adults pride themselves on being different and do not regard this as an indication of inferiority. What form creativity will take in adulthood will depend upon individual interests and abilities, opportunities to do what they want to do, and activities that give the greatest satisfaction. Some young adults find a creative outlet in hobbies while others choose vocations in which they can express their creativity.

1.4 DEVELOPMENTAL TASKS OF EARLY ADULTHOOD

Havighurst (1972) describes some of the developmental tasks of young adults. These include:

1. **Achieving autonomy:** trying to establish oneself as an independent person with a life of one's own 2. Establishing identity: more firmly establishing likes, dislikes, preferences, and philosophies
3. **Developing emotional stability:** becoming more stable emotionally which is considered a sign of maturing
4. **Establishing a career:** deciding on and pursuing a career or at least an initial career direction and pursuing an education
5. **Finding intimacy:** forming first close, long-term relationships
6. **Becoming part of a group or community:** young adults may, for the first time, become involved with various groups in the community. They may begin voting or volunteering to be part of civic organizations (scouts, church groups, etc.). This is especially true for those who participate in organizations as parents.
7. **Establishing a residence and learning how to manage a household:** learning how to budget and keep a home maintained.
8. **Becoming a parent and rearing children:** learning how to manage a household with children.
9. Making marital or relationship adjustments and learning to parent.

1.5 HIGHLIGHTS OF PHYSICAL, COGNITIVE AND PSYCHOLOGICAL DEVELOPMENTS /AIDS TO MASTERY OF DEVELOPMENTAL TASKS

Physical Efficiency: The peak of physical efficiency is generally reached in the mid-twenties, after which there is a slow and gradual decline into the early forties. Thus, during the period when adjustment problems are the most numerous and difficult, the individual is physically able to meet and solve them.

Motor Abilities: Young adults reach the peak of their strength between the ages of twenty and thirty. Maximum speed of response comes between twenty and twenty-five years, after which decline begins at a slow rate. In learning new motor skills, adults in

their early twenties are superior to those who are approaching middle age. Furthermore, young adults can count on their ability to perform in a given situation, which they could not do in adolescence when rapid and uneven growth often caused them to be awkward and clumsy.

Mental Abilities: The most important mental abilities needed for learning and for adjusting to new situations, such as recall of previously learned material, reasoning by analogy, and creative thinking, reach their peak during the twenties and then begin a slow and gradual decline. Even though young adults may not learn quite as rapidly as they did earlier, the quality of their learning does not deteriorate.

More Complex Thinking: As teens progress into young adulthood, they are able to hold and manipulate on their mental "visor" not only single abstractions, but also clusters of abstractions and then systems for organizing abstract thoughts, according to Kurt Fischer, Michael Commons, and others. This assists them perhaps most visibly in mathematics and sciences, but applies to thinking about all phenomena, such as ideas, values, and perspectives.

Appreciation for Diverse Views: This added thinking power is described by William Perry and others as a change from the "right/wrong" framework of adolescence to a more "multiplistic" framework, in which young adults can "see" many points of view, value the diversity of people and perspectives, and appreciate that there can be many right answers to a problem. At first, all ideas seem to have equal value, as one embraces the full diversity of peoples and perspectives. Over time, one finds ways to organize this multiplicity, to identify values and viewpoints that work better for oneself, while respecting that other viewpoint may fit better for others. Ultimately, one evolves a more "relativistic" approach and works out ways to commit personally to certain values amidst the diversity.

Mutuality in Relationships: Young adults are better able to consider different points of view at the same time, that is, to hold multiple perspectives on their mental visor. This allows them to form relationships with peers based on observing that they care about the same things and loyalties to institutions based on observing that they share the same values. They can also understand constrctive criticism, appreciating that the other person is intending to be helpful, even if the effect is painful at the moment. Moving from an "instrumental" to a more "socializable" orientation, in Robert Kegan's terms (see References), young adults are more likely to operate from a principle like the Golden Rule, "Do unto others as you would have them do unto you."

Emotional Regulation: Critical to their safety, young adults acquire a significantly greater capacity for integration of thought and emotion. With the ability to hold the present and the future on their mental visor at the same time, they can weigh immediate rewards against future consequences, putting more effective "brakes" on the emotional intensity and sensation-seeking heightened since puberty.

Risk-taking and Decision-making: With this greater capacity for thinking about future consequences and regulating emotions, young adults have an easier time modulating risk-taking and making decisions about the future, including choices about health, relationships, education, and careers. They can also weigh the impact of their choices on

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others more effectively, in actions as simple as showing up for appointments on time or as complex as parenting a young child.

Caveats: The advent of a new developmental skill, such as multiplicity thinking, does not mean that one uses that skill all the time. Rather, it becomes a new option, one that at first can be tapped only with a great deal of support, probably in one particular area, such as an academic subject. Gradually it becomes easier and more familiar and hence used more frequently across a wider range of life experiences. For more information on these gradations, see Developmental Range. A more sobering caveat is that some people never fully achieve these milestones at all. Although they occur in young adulthood if all goes well, there are by no means automatic, and they can be delayed or severely limited by a number of circumstances, including mental illness; learning disabilities; frequent use of alcohol or other drugs; and abuse, neglect, deprivation, violence, and other traumas. See Individual Differences.

Motivation: When adolescents reach the age of legal maturity, they have a strong desire to be regarded by the social group as independent adults. This provides them with the motivation to master the developmental tasks needed of be so regarded.

Role Model: Adolescents who go to work when they finish high school or training school have role models to imitate. Being associated with adults gives them the motivation to model their behavior along adult lines so that they themselves will be judged as adults. By contrast, adolescents who remain in school or college after they reach legal maturity are thrown mostly with their age-mates and, as a result, they pattern their behavior along the lines of adolescent rather than adult behavior. So long as the dependency state persists, they have little opportunity or motivation to master the developmental tasks of adulthood.

1.6 CHANGES IN BRAIN OF YOUNG ADULTHOOD

At the same time that young adults are experiencing new levels of sophistication in thinking and emotional regulation, their brains are undergoing changes in precisely the areas associated with these functions. While it is not possible to determine cause and effect, the brain and behavior are changing in parallel.

1. **Prefrontal cortex:** The most widely studied changes in young adulthood are in the prefrontal cortex, the area behind the forehead associated with planning, problem-solving, and related tasks. At least two things affect the efficiency of its functioning:
   - **myelination:** the nerve fibers are more extensively covered with myelin, a substance that insulates them so that signals can be transmitted more efficiently, and
   - **synaptic pruning:** the "briar patch" of connections resulting from nerve growth is pruned back, allowing the remaining ones to transmit signals more efficiently.
2. **Connections among regions:** At the same time, the prefrontal cortex communicates more fully and effectively with other parts of the brain, including those that are particularly associated with emotion and impulses, so that all areas of the brain can be better involved in planning and problem-solving.

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3. **"Executive suite":** The cluster of functions that center in the prefrontal cortex is sometimes called the "executive suite," including calibration of risk and reward, problem-solving, prioritizing, thinking ahead, self-evaluation, long-term planning, and regulation of emotion. (See Merlin Donald, Daniel Keating, and others in References.) It is not that these tasks cannot be done before young adulthood, but rather that it takes less effort, and hence is more likely to happen.
4. **20s and beyond:** According to recent findings, the human brain does not reach full maturity until at least the mid-20s. (See J. Giedd in References.) The specific changes that follow young adulthood are not yet well studied, but it is known that they involve increased myelination and continued adding and pruning of neurons. As a number of researchers have put it, "the rental car companies have it right." The brain isn't fully mature at 16, when we are allowed to drive, or at 18, when we are allowed to vote, or at 21, when we are allowed to drink, but closer to 25, when we are allowed to rent a car.

1.7 ADUJUSTMENT IN VARIOUS ASPECTS

- **VOCATIONAL ADJUSTMENT IN EARLY ADULTHOOD**

  For most adults today, happiness depends to a large extent upon satisfactory vocational adjustments. The whole pattern of their lives is dependent on how much they earn and how they earn it. Because an increasing number of women, both single and married, now work outside the home, they too must make vocational adjustments. Studies have revealed that adjustments must be made in a number of areas. Each of these adjustments not only depends upon and in turn influences adjustments in other areas but, even more important, the success or failure the individual experiences in these adjustments has a tremendous influence on personal and social adjustments as well as on the degree of life satisfaction. Of the many areas of vocational adjustment adults must make the following adjustments which are the most common and most important.

  Selection of a Vocation

  The first major adjustment is the selection of a vocation. While some adults have made this selection much earlier and have been trained for the work the vocation demands, many young adults, when they graduate from high school, college, or even a professional training school are not sure of what they want to do for the rest of their lives. Many young adults who have had little or no training for a particular line of work go through a period of trying out one job after another, often in different lines of work. This "job-hopping" as it is called often goes on during the twenties or even into the thirties. When the selection of a vocation will be made depends on certain factors, the most important of which are the individual's liking for the kind of work selected, evidence of ability to do the work successfully, and necessity, due to financial or other responsibilities.

  Many young adults claim that they do not want to go into the same line of work as their parents or other relatives. But even though their first vocational choices may have little relation to the occupations of their fathers or mothers. There is evidence that, the final choice of a job is more often in that general occupational group than in a different. The exception to this general trend is when young adults have had education and training above that of their parents and thus vocational upward mobility is possible.

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Factors making Vocational Selection difficult:

- The ever-increasing number of different kinds of work from which to choose
- Rapid changes in work skills due to increased use of automation
- Lack of flexibility in working time which is especially difficult for women who must adjust their work schedule to their home responsibilities
- Long and costly preparation which makes career shifts impossible
- Sexual stereotypes of certain occupations teaching and nursing as "women's work" and aviation and engineering as "men's work"
- Unfavourable stereotypes of some occupations, especially the service occupations
- A desire for a job that will give a sense of identity rather than one that makes the individual feel like a cog in a big machine
- Lack of security in work, especially seasonal jobs, which influences women's vocational selections more than men's
- Ignorance of one's own capacities due to lack of job experience or vocational guidance
- Insufficient education or training for available jobs
- Unrealistic vocational aims carried over from adolescence or even childhood
- Unrealistic. values and expectations, especially concerning job prestige and autonomy

Adjustment to Work

When adults have made a vocational selection, they must adjust to the work itself, to the hours of the work day or work week, to their coworkers and superiors, to the environment in which the work is done, and to the restrictions the work imposes on their personal lives. For many young adults, especially those who have had little or no work experience during their school or college years, this is often the most difficult of all vocational adjustments. The factor that influences adjustments to work most is the worker's attitude. Havighurst, from a study of workers' attitudes toward work, has come to the conclusion that they can be divided into two general categories which he has labeled **"society-maintaining work attitudes" and "ego-involving work attitudes". The characteristics of these work attitudes are:**

Society-maintaining work attitudes

Workers whose attitudes are society-maintaining have little or no interest in their work per se and gain little personal satisfaction from it. Their main interest is in their paychecks. They often regard their jobs as heavy and unpleasant burdens and look forward to their time of retirement.

Ego-involving work attitudes

Workers who find their jobs ego-involving derive great personal satisfaction from them. For some, work is a basis of self-respect and a sense of worth. For others, it is a means of gaining prestige, a locus of social participation, or a source of intrinsic enjoyment or creative self-expression, as well as a way of making time pass in a pleasant, routine manner. Because work means so much to workers with

such attitudes, they may become preoccupied with it to the exclusion of other interests and dread the time when they will be forced to retire.

Men's Adjustments to Work: There are a number of conditions, that influence men's adjustments to their work.

1. If the job allows them to play the roles they want to play, they will be satisfied and adjust well to their work. If, for example, a man wants to play the role of leader and has been accustomed to playing this role in school and college, he will be satisfied with his work if he is in a position of authority over others.
2. Satisfaction is attained, if men feel that their jobs make use of their abilities and training. Men who are forced, because of limited education and training, to do work which they regard as below the level of their abilities, will derive little satisfaction from their work or from the social group in the community with which they are associated. This dissatisfaction soon spreads to all areas of their lives and has an adverse effect on their personal and social adjustments.
3. Adjustment to work is influenced by how men adjust to authority. Many boys and young men in high school and college resent the authority of their teachers and school administrators. They expect to achieve autonomy when they graduate and enter the work world. How well they can adjust to reality in a world where hierarchy of authority exists will influence their adjustments to their work. If they continue to resent the authority of those above them, they will make poor adjustments to their work.
4. Adjustments to work are influenced by pay raises or lack of them. Adult men expect to be paid more each year than they were the year before and to move slightly higher up on the vocational ladder.
5. Sometimes men can grow vocationally only if they are willing to move to another community. By doing so, the entire family is uprooted and must make adjustments to new patterns of living.

Women's Adjustments to Work: Like men, there are also a number of conditions that influence women's adjustments.

1. When women are unable to find jobs suited to their abilities, training, and expectations, they feel frustrated. This militates against good adjustments to their work and to their co-workers and superiors.
2. If they are forced to take what are considered "sex-appropriate" jobs-instead of jobs in areas where their interests and abilities lie but which are regarded as "men's work"-their frustrations increase.
3. When women feel they are in dead-end jobs, especially as they approach middle age, they often become what Kanter referred to as "bitchy bosses" and take out their frustrations on their subordinates.
4. When women have formed stereotyped occupational aspirations, which means aspirations below their capacities to avoid rivalling or surpassing male workers, they tend to become frustrated when they discover that their capacities and training justify higher occupational aspirations.
5. When women are denied leadership roles in their occupations, especially when they have played such roles in school and college, they are not only frustrated but resentful when they see these roles going to men, many of whom, they feel, have less ability and training for them than they have.

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6. Many women resent having to carry a double work load-one in the work world and one in the home. They may feel guilty because they must neglect many of the homemaking duties other women perform or rely on their children or outside help to assist them. In addition, they may feel guilty if the recreational activities of the family must be curtailed or if they are too busy or too tired when they return from work to take an active part in their children's interests.
7. Many women long for the job they gave up when they assumed the roles of housewife and mother. The more they think back to the calm and peace of their jobs, their salary checks, and their free time to do as they please, the more restrictive, hectic and frustrating their jobs in the home seem to be. This affects both personal and social adjustments. As a result of these feelings on the part of working wives, their home lives may be far from satisfactory for the whole family. This adds to the adjustment problems arising from the work.

Appraisal of Vocational

Adjustment How successfully young adults adjust to their chosen vocations can be judged by three criteria: their achievements on the job, the amount of voluntary "job-hopping" or changing jobs they do and the degree of satisfaction they and their families derive from their work.

Achievements

The first criterion of an individual's vocational adjustment is the degree of success achieved in the job. This motivates young adults to put forth the remendous effort, often at the expense of their health, their families, and their personal interests. Because of this effort, they often reach the peak of their vocational achievements during the mid- to late thirties.

Voluntary Change of Jobs

The second criterion of vocational adjustment is the number of voluntary changes the individual makes in jobs or even in lines or work. The amount of "job-hopping" the individual does can be used as a criterion of success or failure in vocational adjustment. A factory or business organization may shut down and all workers twere thrownout of their jobs. Under such conditions, it does not necessarily mean that the worker made a poor adjustment to the job. Workers voluntarily give up their jobs and look for others because they are bored with the work they are doing, dislike the work environment, feel they are progressing too slowly, or for some other reason, it suggests poor vocational adjustment. Either they have unrealistically high aspirations for their achievements or they have unrealistic concepts of what working means.

Satisfaction

The third criterion of vocational adjustment is the degree of satisfaction derived from work. The degree of satisfaction derived from jobs has a marked influence on the quality and quantity of young adults' work. Satisfaction increases their motivation to do what they are capable of doing and to learn more about the work so that they can perform it more efficiently. It also increases ego-involvement in their work and this further increases their motivation. Workers who are satisfied with their jobs become dedicated to their work and loyal to their organization. As a result, they play an important role in keeping worker morale at a high level. From the personal point of view, job satisfaction contributes to the worker's self-satisfaction and this, in turn, contributes to the worker's happiness.

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Conditions Influencing Vocational Satisfaction

Opportunity to Choose Work: Men and women who can choose jobs in areas in which they are interested and can use their abilities and training are usually better satisfied than those who must take what is available.

Work Meeting Needs and Interests: Jobs involving work that meets the needs and interests of the workers lead to greater job satisfaction than those that fail to meet individual needs and interests.

Vocational Expectations: Adults who expect their work to give them the autonomy they did not have when they were younger, and to rise rapidly on the vocational ladder, will become discouraged and dissatisfied with their jobs if these expectations are not met.

Stimulating versus No stimulating Work: The more stimulating the work involved in a job, the greater satisfaction the worker derives from it. Non-stimulating, routine work leads to boredom and this, in turn, leads to job dissatisfaction.

Degree of Career Orientation: Career-oriented workers are willing to work up to their capacities, to try to improve their skills, and to make personal sacrifices in terms of time and effort in the hope of achieving success.

Vocational Security: A reasonable amount of job security will contribute to the satisfaction of all workers while uncertainty-if they fear they may be put out of work because of automation or that they may be fired makes them feel that they are "sitting on the top of a volcano."

Level of Education: Adults with college degrees are usually better satisfied with their jobs than those who have only high school diplomas. "The least satisfied are, for the most part, the dropouts from high school or college because they find themselves in dead-end jobs or jobs with little security.

Opportunities for Advancement: Workers who see a possibility of advancement will be far more satisfied with their jobs than those who suspect or know that they are in "dead-end" jobs.

Stereotypes about Jobs: Unfavorable stereotypes about jobs, such as the service jobs or those considered un appropriate for members of the worker's sex, make workers dissatisfied with their jobs when they realize they are regarded unfavorably by the social group.

Occupational Stress: Too much responsibility, a too-heavy work load, feeling unqualified for the job, or necessity for making decisions affecting the lives of others tend to lead to stress on the part of workers and this weakens their satisfaction with their work.

Working Conditions: A reasonable amount of autonomy, the chances for congenial associations with co-workers, lack of discrimination, fair treatment and consideration from superiors, and liberal fringe benefits add to the worker's job satisfaction.

Attitudes of Significant People: The satisfaction of workers is increased when they know that family members are proud of their jobs and satisfied with the salary they receive and when friends and members of the social group regard their jobs favourably.

- **MARITAL ADJUSTMENTS**

Just as the ever-increasing number of vocational opportunities makes vocational selection and adjustment difficult, so does the ever-increasing number of family

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patterns make marital adjustment difficult. This difficulty is increased when one spouse has grown up in a family where the lifestyle differs markedly from that of the other spouse. A woman, for example, whose childhood home life was that of the typical nuclear family may and very likely will find it difficult to adjust to the conditions and problems that arise when she marries a man from an elongated (joint) family background. A careful study of different family patterns will help to emphasize the marital adjustment difficulties that are almost inevitable when husband and wife have been brought up in homes where different family patterns prevailed.

During the first year or two of marriage, the couple normally must make major adjustments to each other, to members of their families, and to their friends. While these adjustments are being made, there are often emotional tensions and this then is understandably a very stormy period. After adjusting to each other, their families, and friends, they must adjust to parenthood. This increases the adjustment problems if it comes while the earlier adjustments are being made.

A person who marries during their thirties or in middle age frequently require a longer time for adjustments and the end result is often not as satisfactory as in the case of those who marry earlier. However, those who marry in their teens or early twenties tend to make the poorest adjustments of all as shown by the high divorce rate among those who married at these ages.

The times when adjustments to different aspects of marital life must be made differ according to the age at which men and women marry. However, as Glick has reported, there are certain ages when characteristically important events such as, birth of the first child, last child, marriage of the first child, death of the one of the spouses etc., necessitate major adjustments. Of the many adjustment problems in marriage, the four most common and the. most important for marital happiness are adjustment to a mate, sexual adjustments, financial adjustments, and in-law adjustments.

1. Adjustment to a Spouse:

The first major adjustment problem in marriage is adjustment to a mate. Interpersonal relationships play as important a role in marriage as in friendships and business relationships. However, in the case of marriage, the interpersonal relationships are far more difficult to adjust to than in social or business life because they are complicated by factors not usually present in any other area of the individual's life. The more experience in interpersonal relationships both the man and the woman have had in the past, the greater social insight they have developed, and the greater their willingness to cooperate with others, the better they will be able to adjust to each other in marriage.

Far more important to good marital adjustment is the ability of husband and wife to relate emotionally to each other and to give and receive love. Men who were trained during childhood to control the expression of their emotions-with the possible exception of anger -may have learned not to show affection, just as they learned not to show fear. This lack of expression of affection, Sattel has pointed out, may take one of two forms: lack of indication of affection or lack of support and appreciation for the wife's efforts and behavior. Men may also rebuff expressions of affection from others and thus seem cold and aloof to their wives-an attitude they regard as masculine.

While women have not usually been subjected to similar training, many who felt rejected by family and peers during childhood have learned not to show affection for others as a defense against possible rejection of that affection. A husband and wife who have the habit of not expressing affection will have difficulty establishing a warm and close relationship because each interprets the other's behavior as an indication of "not caring." Almost as important as ability and willingness to show affection is ability and willingness to communicate. Throughout childhood and adolescence, those who could or would communicate with their peers were more popular than those who tended to be self-bound. Adults who have learned to communicate with others and who are willing to do so avoid many of the misunderstandings that complicate marital adjustment. Adults who were popular throughout childhood and adolescence have acquired the ability to adjust to others and the social insight necessary to make adjustments.

They have also learned to give and receive affection from their peers, to communicate with them, and to show that they enjoy being with them and value their friendship. These experiences go a long way toward making marital adjustments easier. However, other factors contribute to the ease or difficulty with which the adult adjusts to a mate in marriage. The present trend toward "living together" or cohabitation among many adolescents and young adults, especially those who are still in college or professional training school, has been found to ease the adjustment problems to a mate. Having lived in a marital relationship with a member of the opposite sex, the individual has 'Iearned how to eliminate some of the problems such a relationship gives rise to and how to solve those that do arise. While cohabitation is not a socially accepted pattern of behavior, there is some evidence that it makes for better marriages and eliminates some of the problems that lead to divorce.

Factors Influencing Adjustment to A Mate

- **Concept of an Ideal Mate**
  In choosing a marriage partner, both men and women are guided to some extent by a concept of an ideal mate built up during adolescence. The more the individual must readjust to reality, the more difficult the adjustment to the mate will be.
- **Fulfilment of Needs**
  If good adjustments are to be made, a mate must fulfill needs stemming from early experiences. If the adult needs recognition, a sense of achievement, and social status to be happy, the mate must help meet these needs.
- **The similarity of Backgrounds**
  The more similar the backgrounds of husband and wife, the easier the adjustment. However, even when their backgrounds are similar, each adult has acquired a unique outlook on life, and the more these outlooks differ, the more difficult the adjustment will be.
- **Common Interests**
  Mutual interests in things the couple can do or enjoy together lead to better adjustments than mutual interests that are not easily shared.

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- **Similarity of Values**
  Well-adjusted couples have more similar values than those who are poorly adjusted. Similar backgrounds are likely to produce similar values. Role Concepts Each mate has a definite concept of the role a husband and wife should play, and each expects the other to play that role. When role expectations are not fulfilled, conflict and poor adjustment resu It.
- **Change in life**
  Pattern Adjustment to a mate means reorganizing the pattern of living, revamping friendships and social activities, and changing occupational requirements, especially for the wife. These adjustments are often accompanied by emotional conflicts.

2. Sexual Adjustments:

The second major and one of the most difficult adjustment problems in marriage. For women, sexual adjustments tend to be more difficult to make and the end results less satisfactory than for men. Rubin has explained why women find sexual adjustments especially difficult, "Socialized from infancy to inhibit and repress their sexuality, women can't just switch to uninhibited enjoyment as the changing culture of their husbands dictate". The present trend toward accepting premarital intercourse as a part of the dating pattern, has helped to ease the adjustment problem arising from this area of marriage for women. Cohabitation, which many young people regard as a form of "trial marriage," has likewise helped to overcome the sexual adjustment problems which most young women and some young men in the past had to solve before making good adjustments to their marriages.

Many factors influence sexual adjustments to marriage and these factors have a greater influence on men and women who have had no premarital sexual experiences, they can and oilen do affect the early premarital sexual experiences that accompany dating and cohabitation.

3. Financial Adjustments:

The third major adjustment problem in marriage is financial. Money or lack of it has a profound influence on adults' adjustments to marriage. Today, as a result of premarital experience in the business world, many wives resent not having control of the money needed to run a home, and they find it difficult to adjust to living on their husbands' earnings after having been accustomed to spending their own money as they wish. Many men also find financial adjustments very difficult, particularly if the wife worked after they were married and then must stop with the arrival of the first child. Not only is their total income reduced, but the husband's earnings must now cover a wider area of expenses. The couple's financial situation can pose a threat to their marital adjustments in two important areas. First, friction may develop if the wife expects her husband to share the work load.

During the early years of marriage, when expensive labour-saving devices and domestic help are most needed, the family usually cannot afford such luxuries, and the wife may want her husband to help share the burden of running the home. This frequently causes friction, especially when the man considers homemaking "woman's work." marital adjustments can be adversely affected. The second common threat that the couple's financial situation poses to

good marital adjustments comes from a desire to have material possessions as a stepping-stone to upward social mobility and a symbol of the family's success. If a husband is unable to provide his wife and family with the material possessions they want, they may feel resentful of him, and a frictional attitude develops. Many wives, faced with this problem, take jobs to provide the family with such possessions. Many husbands object to this because they feel that others will think they are unable to provide for their families as well as husbands of nonworking wives do.

4. In-Law Adjustments:

The fourth major adjustment problem in marriage is to the in-laws. With marriage, every adult acquires a whole new set of relatives-the in-laws. These are people of different ages, ranging from babies to the elderly, who often have different interests and values and sometimes markedly different educational, cultural and social backgrounds. Both husbands and wives must learn to adjust to their in-laws if they are to avoid frictional relationships with their spouses. In-law trouble is especially serious during the early years of marriage and is one of the most important causes of marital breakup during the first year. It is more serious in families where there are no children or only a few children than in large families, where in-law help is often welcome. It is also more common in middle- and upper-class groups than in lower-class groups, where the traditional concept of an elongated family, with relatives as the chief source of companionship, is more widely held.

Factors Influencing In-Law Adjustments

Stereotypes

The widely accepted stereotype of the "typical mother-in-law" can lead to unfavourable mental sets even before marriage. Unfavourable stereotypes about the elderly that they are bossy and interfering, can add to in-law problems.

Desire for Independence

Young married adults tend to resent advice and guidance from their parents, even if they must accept financial aid, and they especially resent such interference from in-laws.

Family Cohesiveness

Marital adjustments are complicated when one spouse devotes more time to relatives than the other spouse wants to; when a spouse is influenced by family advice; or when a relative comes for an extended visit or lives with the family permanently.

Social Mobility

Young adults who have risen above the status of their families or that of their in-laws may want to keep them in the background. Many parents and relatives resent this and hostile relationships with the young couple as well as marital friction are likely to develop.

Care of Elderly

Relatives Caring for elderly relatives is an especially complicating factor in marital adjustments today because of present unfavourable attitudes toward older people and the belief that young people should be independent of relatives, especially when there are children in the family.

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Financial Support of In-Laws

When a young couple must contribute to or assume responsibility for the financial support of in-laws, it can and often does lead to a frictional marital relationship. This is because the spouse whose in-laws must be aided financially resents having to make sacrifices of wants or even needs to make this aid possible.

Factors have been found to contribute to good in-law adjustments. These include:

- Approval of the marriage by the parents of both spouses
- Opportunities for the parents to meet and become acquainted before the marriage.
- Friendliness on the part of both families when they meet.
- In-law problems are also eased if the marriage is between persons of the same religion.
- If the couple has taken a course in marriage, especially the wife.
- If relationships between the grandparents and grandchildren are good ¬ If the in-laws have. similar patterns of social activities.
- If the in-laws as well as the young couple are happily married.
- If husband and wife accept each other's family as their own.

Criteria of Marital Adjustment

The success of a marriage is reflected in a number of interpersonal relationships and behavior patterns. While these may vary, to some extent, for different people and for marriages at different ages, they can, for the most part, be used to assess the adjustment of any marriage.

The happiness of Husband and Wife

A husband and wife who are happy together derive satisfaction from the roles they play. They also have a mature and stable love for each other, have made good sexual adjustments, and have accepted the parental role.

Good Parent-Child Relationships

Good parent-child relationships reflect successful marital adjustment and contribute to it. If parent-child relationships are poor, the home climate will be marked by friction, which makes marital adjustment difficult. Good Adjustment of Children who are well adjusted, well-liked by their peers, and successful and happy in school are proof of their parents' good adjustment to marriage and parental roles.

Ability to Deal Satisfactorily with Disagreements

Disagreements between family members, which are inevitable, generally end in one of three ways: There is a temporary truce with no solution, one person gives in for the sake of peace, or all family members try to understand the others' point of view. In the long run, only the latter leads to satisfactory adjustments though the first two help to reduce the tension that friction gives rise to.

Togetherness

When marital adjustments are successful, the family enjoys spending time together. If

good family relationships are built up during the early, formative years, men and women will retain close ties with their families after they grow up, marry and establish homes of their own. Good

Financial Adjustments

In many families, one of the most common sources of friction and resentment centers around money. Regardless of the income, a family that learns to budget its expenses so as to avoid constant debts and to be satisfied with what it can afford to have and do is better adjusted than one in which the wife constantly complains about the husbands earning power or takes a job to supplement his earnings.

Good In-Law Adjustments

Husbands and wives who get along well with their in-laws, especially parents, brothers, and sisters-in-law, are far less likely to have frictional relationships.

1.8 PHYSICAL DEVELOPMENT

Development takes on new meaning in adulthood because the process is no longer defined by physical and cognitive growth spurts. Adulthood, which encompasses the majority of a person's life span, is marked instead by considerable psychosocial gains that are coupled with steady but slow physical decline. Age clocks, or the internal sense of timing of physical and social events, determine the various life stages through which adults pass. Although people age at different rates, the majority of Americans, reinforced by social norms, pass through a series of predictable periods.

Perhaps the best-known stage theory of adult development is that offered by Daniel Levinson. According to Levinson, the ages of 17 to 45 encompass early adulthood, which he divides into the novice phase (17–33) and the culminating phase (33–45). Levinson further divides the novice phase into the stages of early adult transition (17–22), entering the adult world (22–28), and age-30 transition (28–33). The culminating phase (33–45) consists of the settling down (33–40) and midlife transition (40–45) stages. As with any stage theory, these stages are only a guide for the development that normally occurs along a continuum. Not everyone progresses through each stage at exactly the same age. The young adult years are often referred to as the peak years. Young adults experience excellent health, vigor, and physical functioning. Young adults have not yet been subjected to age-related physical deterioration, such as wrinkles, weakened body systems, and reduced lung and heart capacities. Their strength, coordination, reaction time, sensation (sight, hearing, taste, smell, touch), fine motor skills, and sexual response are at a maximum.

Additionally, both young men and women enjoy the benefits of society's emphasis on youthfulness. They typically look and feel attractive and sexually appealing. Young men may have healthy skin, all or most of their hair, and well-defined muscles. Young women may have soft and supple skin, a small waistline, and toned legs, thighs, and buttocks. Early in adulthood, neither gender has truly suffered from any double standard of aging: mainly, the misconception that aging men are distinguished, but aging women are over the hill.

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With good looks, great health, and plenty of energy, young adults dream and plan. Adults in their 20s and 30s set many goals that they intend to accomplish—from finishing graduate school, to getting married and raising children, to becoming a millionaire before age 30. Young adulthood is a time when nothing seems impossible; with the right attitude and enough persistence and energy, anything can be achieved.

1.9 HEALTH IN ADULTHOOD

Health and physical fitness during young adulthood are excellent. People in their 20s and 30s perform at exceedingly high levels on tests of endurance and stamina. They generally are at their best in terms of physical conditioning and overall sense of well-being. Lest the picture seem too rosy, young adults are not completely immune to the effects of aging. The closer they get to age 40, the more physical limitations they begin to notice. In fact, many young adults detect a significant decrease in energy and increase in health concerns after 40. However, with proper diet and exercise, the physical and psychological vitality that accompanies young adulthood can be maintained well into the 40s and beyond.

The most common health problems of young adulthood are arthritis, asthma, diabetes, depression and other mental problems, hypertension (high blood pressure), multiple sclerosis, and ulcers. Other conditions, such as atherosclerosis (hardening of the arteries), cirrhosis of the liver, heart and lung problems, kidney problems, and a variety of other diseases, may not exhibit symptoms at this stage, but may already be causing internal damage. Two additional categories of health concerns during young adulthood are disabilities and sexually transmitted diseases.

Disabilities

A physical disability is any physical defect, change, difficulty, or condition that has the potential to disrupt daily living. It may be present from birth, result from disease or injury, or develop later. A physical disability, for example, may be the absence of a vital organ from birth, deafness that develops in childhood, a spinal cord injury from a motorcycle accident, or a chronic condition like multiple sclerosis. The most common physical disabilities in adults are cerebral palsy, blindness, deafness, spinal cord injuries, and a number of chronic medical conditions, such as diabetes. Persons who evidence subnormal intellectual functioning and social skills beginning before age 18 are developmentally disabled (mentally retarded). By definition, the developmentally disabled have an IQ of 70 or less and do not demonstrate culturally appropriate levels of social skills, living skills, responsibility, communication, and personal independence for their age.

Adults with a psychiatric disability (mental illness, or psychological disturbance) struggle with mild to incapacitating emotional problems and limitations that are often caused by either anxiety or affective disorders. Anxiety disorders are characterized by bouts of anxiety and/or panic. The recurrence of such episodes prompts an avoidance of people, places, and things. In many cases, the individual knows his or her anxiety is irrational, but is unable to master it. A combination of drug and psychological therapies can effectively treat anxiety disorders, which can otherwise severely disrupt life activities.

Affective disorders (mood disorders) cause a person to experience abnormally high and/or low feelings. Although several types of mood disorders exist, the two most common

are unipolar depression, marked by feelings of self-blame, sadness, guilt, and apathy; and bipolar disorder (manic-depressive), marked by alternating periods of depression and mania (extreme hyperactivity and elation). Most affective disorders are treatable with a combination of medications and counseling. Unipolar depression responds well to antidepressant medications; bipolar disorder, to lithium carbonate.

Sexually transmitted diseases

Certain sexually transmitted diseases (STDs) are caused by microscopic single-cell organisms known as bacteria. These organisms invade cells of the body, causing infection and disease. The most common bacterial STDs are gonorrhea, nongonococcal urethritis, nongonococcal cervicitis, chlamydia, and syphilis. Other STDs are caused by viruses — noncellular, microscopic particles that replicate themselves within invaded cells. Antibiotic medications are ineffective against them, making viruses very difficult or impossible to eliminate. The most common viral STDs are herpes, genital warts, and human immunodeficiency virus (HIV).

HIV is the virus that causes acquired immunodeficiency syndrome (AIDS). HIV does not directly cause death; rather it depresses the immune system of a victim to the point that infection and disease overwhelm the body's natural defenses. For HIV to attack human cells, it must first attach itself to special receptors on the cells' surface. Through several complex chemical reactions, cells attacked by HIV become factories that produce more viruses, which in turn attack more cells, which in turn become factories, and so on. Eventually the immune system becomes so depressed that almost any disease can easily overwhelm bodily defenses.

Based on medical research, HIV appears to be spread through the exchange of body fluids (blood, vaginal secretions, and semen), not through casual contact. The following are the most probable means of transmitting and contracting HIV:

1. Engaging in sexual activity that involves the exchange of fluids.
2. Receiving contaminated blood.
3. Using contaminated hypodermic needles.
4. Passing from an infected mother to her child during pregnancy or childbirth.

Although AIDS is presently incurable, treatments are available that slow progression of the disease by restoring immune system functioning. People can best protect themselves from HIV and AIDS by steering clear of high-risk activities and partners, as well as by practicing abstinence, using condoms during sex, and not sharing needles.

Death and young adulthood

Death rates during young adulthood are lower than during any other period of the life span. Except for HIV and AIDS in males and malignancies in females, the leading cause of death during the 20s and 30s is accidents. Death rates, however, double each decade after age 35. Socioeconomic status and race also have an impact on health and death rates. Less educated, urban, and poorer minorities tend to have the worst health and are at the greatest risk of premature death from violent crimes. For example, minority Americans between the ages 25 and 45 are more likely to die as a result of homicide than their white

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counterparts. Additionally, these same Americans are more likely to die of a drug overdose than whites of the same age.

1.10 INTELLECTUAL DEVELOPMENT

Does intelligence increase or decrease during adulthood? This question has plagued psychologists for decades. Cross-sectional studies of IQ tend to show that young adults perform better than middle-aged or older adults, while longitudinal studies of IQ appear to indicate that people increase in intelligence through the decades, at least until their 50s. But the issue of intellectual development in adulthood is not so straightforward or simple. The results of the cross-sectional studies—younger adults, as a group, do better on IQ tests—may be due more to cohort influences, such as longer schooling or greater exposure to television than that enjoyed by the previous generation, than to aging influences. The results of the longitudinal studies—over time, persons do better on IQ tests—may be due to the effects of practice, increased comfort taking such tests, or the tendency for those who remain in the studies to perform better than those who drop out. Attempts to measure IQ are complicated by the fact that there are different types of intelligence. Crystallized intelligence is the ability to use learned information collected throughout a lifetime, and fluid intelligence is the ability to think abstractly and deal with novel situations. Young adults tend to score higher on tests of fluid intelligence, while middle adults tend to score higher on tests of crystallized intelligence. Variables unique to young, middle, and older adults complicate any comparison of IQs among the groups. All things considered, the results of traditional IQ tests suggest that intelligence usually continues at least at the same level through young and middle adulthood.

Thinking patterns

Young adult thinking, especially in a person's early 20s, resembles adolescent thinking in many ways. Many young people see life from an idealistic point of view, in which marriage is a fairy tale where lovers live happily ever after, political leaders never lie or distort the truth, and salespeople always have consumers' best interests in mind. People in their 20s have not always had the benefit of multiple life experiences, so they may still view the world from a naively trusting and black-or-white perspective. This is not to say that young adults do not question their world, challenge rules, or handle conflicts. These, and more, are normal developmental tasks that lead to realistic thinking and recognition of life's ambiguities. But until young adults reach that level of thinking, they may want absolute answers from absolute authorities.

Many young adults—particularly those who have attended college—develop the ability to reason logically, solve theoretical problems, and think abstractly. They have reached Piaget's formal operations stage of cognitive development. During this stage, individuals can also classify and compare objects and ideas, systematically seek solutions to problems, and consider future possibilities. As young adults confront and work through the gray areas of life, some may go on to develop postformal thinking, or practical street smarts. Developing the wisdom associated with postformal thinking is a lifelong process, which begins in the teenage years and is fully realized in the older adult years.

1.11 PARENTING

Having Children

Do you want children? Do you already have children? Increasingly, families are postponing or not having children. Families that choose to forego having children are known as childfree families, while families that want but are unable to conceive are referred to as childless families. As more young people pursue their education and careers, age at first marriage has increased; similarly, so has the age at which people become parents. With a college degree, the average age for women to have their first child is 30.3, but without a college degree, the average age is 23.8. Marital status is also related, as the average age for married women to have their first child is 28.8, while the average age for unmarried women is 23.1. Overall, the average age of first-time mothers has increased to 26, up from 21 in 1972, and the average age of first-time fathers has increased to 31, up from 27 in 1972 in the United States. The age of first-time parents in the U.S. increased sharply in the 1970s after abortion was legalized. Since the age of first-time parents varies by geographic region in the U.S. and women's rights to abortion are being challenged in some states, it will be interesting to follow the norms and trends for first-time parents in the future.

The decision to become a parent should not be taken lightly. There are positives and negatives associated with parenting that should be considered. Many parents report that having children increases their well-being (White & Dolan, 2009). Researchers have also found that parents, compared to their non-parent peers, are more positive about their lives (Nelson, Kushlev, English, Dunn, & Lyubomirsky, 2013). On the other hand, researchers have also found that parents, compared to non-parents, are more likely to be depressed, report lower levels of marital quality, and feel like their relationship with their partner is more businesslike than intimate (Walker, 2011).

If you do become a parent, your parenting style will impact your child's future success in romantic and parenting relationships. Recall from the module on early childhood that there are several different parenting styles. Authoritative parenting, arguably the best parenting style, is both demanding and supportive of the child (Maccoby & Martin, 1983). Support refers to the amount of affection, acceptance, and warmth a parent provides. Demandingness refers to the degree a parent controls their child's behavior. Children who have authoritative parents are generally happy, capable, and successful (Maccoby, 1992).

1.12 COGNITIVE DEVELOPMENT IN EARLY ADULTHOOD

Beyond Formal Operational Thought: Postformal Thought

In the adolescence module, we discussed Piaget's formal operational thought. The hallmark of this type of thinking is the ability to think abstractly or to consider possibilities and ideas about circumstances never directly experienced. Thinking abstractly is only one characteristic of adult thought, however. If you compare a 14-year-old with someone in their late 30s, you would probably find that the latter considers not only what is possible, but also what is likely. Why the change? The young adult has gained experience and understands why possibilities do not always become realities. This difference in adult and adolescent thought can spark arguments between the generations.

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Figure. As young adults gain more experience, they think increasingly more in the abstract and are able to understand different perspectives and complexities.

Here is an example. A student in her late 30s relayed such an argument she was having with her 14-year-old son. The son had saved a considerable amount of money and wanted to buy an old car and store it in the garage until he was old enough to drive. He could sit in it, pretend he was driving, clean it up, and show it to his friends. It sounded like a perfect opportunity. The mother, however, had practical objections. The car would just sit for several years while deteriorating. The son would probably change his mind about the type of car he wanted by the time he was old enough to drive and they would be stuck with a car that would not run. She was also concerned that having a car nearby would be too much temptation and the son might decide to sneak it out for a quick ride before he had a permit or license.

Piaget's theory of cognitive development ended with formal operations, but it is possible that other ways of thinking may develop after (or "post") formal operations in adulthood (even if this thinking does not constitute a separate "stage" of development). Postformal thought is practical, realistic, and more individualistic, but also characterized by understanding the complexities of various perspectives. As a person approaches the late 30s, chances are they make decisions out of necessity or because of prior experience and are less influenced by what others think. Of course, this is particularly true in individualistic cultures such as the United States. Postformal thought is often described as more flexible, logical, willing to accept moral and intellectual complexities, and dialectical than previous stages in development.

1.13 CHAPTER SUMMARY

By the time we reach early adulthood, our physical maturation is complete, although our height and weight may increase slightly. In early adulthood, our physical abilities are at their peak, including muscle strength, reaction time, sensory abilities, and cardiac

functioning. Most professional athletes are at the top of their game during this stage, and many women have children in the early adulthood years. The first major adjustment is the selection of a vocation. While some adults have made this selection much earlier and have been trained for the work the vocation demands, many young adults, when they graduate from high school, college, or even a professional training school are not sure of what they want to do for the rest of their lives. Many young adults who have had little or no training for a particular line of work go through a period of trying out one job after another, often in different lines of work. When adults have made a vocational selection, they must adjust to the work itself, to the hours of the work day or work week, to their co-workers and superiors, to the environment in which the work is done, and to the restrictions, the work imposes on their personal lives. For many young adults, especially those who have had little or no work experience during their school or college years, this is often the most difficult of all vocational adjustments. The second criterion of vocational adjustment is the number of voluntary changes the individual makes in jobs or even in lines or work. The amount of "job-hopping" the individual does can be used as a criterion of success or failure in vocational adjustment.

A factory or business organization may shut down and all workers were thrown out of their jobs. Under such conditions, it does not necessarily mean that the worker made a poor adjustment to the job. Workers voluntarily give up their jobs and look for others because they are bored with the work they are doing, dislike the work environment, feel they are progressing too slowly, or for some other reason, it suggests poor vocational adjustment. The first major adjustment problem in marriage is adjustment to a mate. Interpersonal relationships play as important a role in marriage as in friendships and business relationships. However, in the case of marriage, the interpersonal relationships are far more difficult to adjust to than in social or business life because they are complicated by factors not usually present in any other area of the individual's life. Development takes on new meaning in adulthood because the process is no longer defined by physical and cognitive growth spurts. Adulthood, which encompasses the majority of a person's life span, is marked instead by considerable psychosocial gains that are coupled with steady but slow physical decline. Health and physical fitness during young adulthood are excellent. People in their 20s and 30s perform at exceedingly high levels on tests of endurance and stamina. They generally are at their best in terms of physical conditioning and overall sense of well-being.

1.14 REVIEW QUESTIONS

SHORT ANSWER TYPE QUESTIONS

1. **Explain factors influencing adjustment to a mate.**
2. **Explain factors influencing in-law adjustments.**
3. **What factors contribute to good in-law adjustments?**
4. **Write a short note on intellectual development.**
5. **What does mean by parenting in early adulthood?**

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LONG ANSWER TYPE QUESTIONS

1. **Explain early adulthood & its characteristics.**
2. **What are the developmental tasks of early adulthood?**
3. **What are the changes in the brain of young adulthood?**
4. **What is the adjustment in various aspects?**
5. **Explain health in adulthood.**

1.15 MULTIPLE CHOICE QUESTIONS

1. **With this greater capacity for thinking about future consequences and regulating emotions, young adults have an easier time modulating _____ about the future.**
   a. Motivation
   b. Risk-taking and making decisions
   c. Role Model
   d. Myelination

2. **When adolescents reach the age of legal maturity, they have a strong desire to be regarded by the social group as independent adults. This provides them with the _____.**
   a. Motivation
   b. Role Model
   c. Myelination
   d. Synaptic pruning

3. **Being associated with adults gives them the motivation to model their behavior along adult lines so that they themselves will be judged as adults:**
   a. Motivation
   b. Myelination
   c. Synaptic pruning
   d. Role Model

4. **The most widely studied changes in young adulthood are in the _____, the area behind the forehead associated with planning, problem-solving, and related tasks.**
   a. Motivation
   b. Prefrontal cortex
   c. Synaptic pruning
   d. Role Model

5. **The nerve fibers are more extensively covered with myelin, a substance that insulates them so that signals can be transmitted more efficiently:**
   a. Myelination
   b. Synaptic pruning
   c. Connections among regions
   d. Executive suite

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6. At the same time, the prefrontal cortex communicates more fully and effectively with other parts of the brain, including those that are particularly associated with emotion and impulses:

a. Myelination
b. Synaptic pruning
c. Connections among regions
d. Executive suite

7. The cluster of functions that center in the prefrontal cortex is sometimes called the " _____.

a. Executive suite
b. Synaptic pruning
c. Connections among regions
d. Vocational expectations

8. _____ adults who expect their work to give them the autonomy they did not have when they were younger, and to rise rapidly on the vocational ladder

a. Vocational Expectations
b. Degree of Career Orientation
c. Vocational Security
d. Level of Education

9. A reasonable amount of job security will contribute to the satisfaction of all workers while uncertainty:

a. Vocational Expectations
b. Degree of Career Orientation
c. Vocational Security
d. Level of Education

10. Adults with college degrees are usually better satisfied with their jobs than those who have only high school diplomas:

a. Vocational Expectations
b. Degree of Career Orientation
c. Vocational Security
d. Level of Education

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UNIT II

MIDDLE ADULTHOOD

STRUCTURE

NOTES

2.1 LEARNING OBJECTIVE

After learning this unit, students will be able to:

- Understand the Middle Adulthood.
- Know the Developmental Tasks of Middle Age.
- Explain Characteristics of Middle Adulthood.
- Elaborate on the Physical Changes.
- Understand the Sensory Changes.
- Enlist the Health Concerns.
- Derive Intellectual Development.

2.2 INTRODUCTION TO MIDDLE ADULTHOOD

During middle adulthood, the aging process becomes more apparent. Around the age of 60, the eyes lose their ability to adjust to objects at varying distances, known as presbyopia. Most people between the ages of 40 and 60 will need some form of corrective lenses for vision deficits. Middle-aged adults are also at higher risk than younger adults for certain eye problems, such as glaucoma. Hearing also further declines: 14 percent of middle-aged Americans have hearing problems. Skin continues to dry out and is prone to more wrinkling, particularly on the sensitive face area. Age spots and blood vessels become more apparent as the skin continues to dry and get thinner. The muscle-to-fat ratio for both men and women also change throughout middle adulthood, with an accumulation of fat in the stomach area.

Women experience a gradual decline in fertility as they approach the onset of menopause—the end of the menstrual cycle—around 50 years old. This process involves hormonal changes and may last anywhere from six months to five years. Because of the shifting hormone levels, women going through menopause often experience a range of other symptoms, such as anxiety, poor memory, inability to concentrate, depressive mood, irritability, mood swings, and less interest in sexual activity. Introduction The objective of this lesson is to understand the concepts, characteristics, and developmental tasks of middle age, to understand the physical, and cognitive development during middle adulthood, and the third objective is to understand the socio-emotional development during middle age. It is the period from 40 years of age to about 60 years. Middle adulthood is the time for expanding personal and social involvement and responsibilities. It is the time at which assist the new generation in becoming competent and mature individuals. It is the time for reaching and maintaining satisfaction in a career. And it is a time when there is a decline in physical skills and balancing of work and relationship occurs. And it is a time when reassessment of life priorities happened. So, this is about Middle adulthood. Let us now see, what are the developmental tasks of middle age.

2.3 DEVELOPMENTAL TASKS OF MIDDLE AGE

Like the developmental tasks of other periods, those of middle age are not all mastered at the same time or in the same way by all people. Some are more likely to be mastered

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during the early years of middle age, and some in the latter part of the period. This, however, will vary for different individuals.

The age at which middle-aged people married, the time when they became parents, and the number of children they have all influence the age at which they must adjust to the developmental tasks relating to family life, to civic and social responsibilities, and to adjust leisure-time activities. Most of the developmental tasks of middle age prepare the individual for successful adjustment to old age; thus, the mastery of these tasks is important for success and happiness not only in middle age but also in the later years of life.

- Tasks Relating to Physical Changes - These include the acceptance and adjustment to the physical changes that normally occur during middle age.
- Tasks Relating to Changed Interests - The middle-aged person often assumes civic and social responsibilities and develops an interest in adult-oriented leisure-time activities in place of family-oriented activities, which prevailed during early adulthood.
- Tasks Relating to Vocational Adjustments - These tasks revolve around establishing and maintaining a relatively stable standard of living.
- Tasks Relating to Family Life - The important tasks in this category include relating oneself to one's spouse as a person, adjusting to aging parents, and assisting teenage children to become responsible and happy adults.

2.4 CHARACTERISTICS OF MIDDLE ADULTHOOD

Like every period in the life span, middle age is associated with certain characteristics.

Middle Age Is a Dreaded Period

The first characteristic of middle age is that it is a dreaded period in the life span. It is recognized that, next to old age, it is the most dreaded period in the total life span. Men and women have many reasons, that seem valid to them-for dreading middle age. Among these are the many unfavorable stereotypes about middle-aged people, the traditional beliefs concerning the mental and physical deterioration that are believed to accompany the cessation of reproductive life, and the emphasis on the importance of youth as compared with the reverence for age found in many other cultures. These all-influence adult attitudes unfavorably as they approach this period in their lives. While dreading middle age, most adults become nostalgic about their younger years and wish that they could turn back the hands of the clock.

Middle Age Is a Time of Transition

Just as puberty is a time of transition from childhood to adolescence and then to adulthood, middle age is the time when men and women leave behind the physical and behavioral characteristics of adulthood and enter a period of life when new physical and behavioral characteristics will prevail. It has been said that this is the time when men undergo a change in virility and women a change in fertility. Transition always means adjustment to new interests, new values, and new patterns of behavior. In middle age, sooner or later all adults must make adjustments to physical changes and must realize that the behavioral

patterns of their younger years have to be radically revised. Adjustment to changed roles is even more difficult than an adjustment to changed physical conditions and changing interests.

Middle Age Is a Time of Stress

Radical adjustments to changing roles and patterns of life, especially when accompanied by physical changes, always tend to disrupt the individual's physical and psychological homeostasis and lead to a period of stress-a time when a number of major adjustments must be made in the home, business, and social aspects of their lives. Marmor has divided the common sources of stress during middle age that led to disequilibrium into four major categories. They are

- Somatic stress - which is due to physical evidence of aging.
- Cultural stress - stemming from the high value placed on youth, vigor, and success by the cultural group.
- Economic stress - resulting from the financial burden of educating children and providing status symbols for all family members.
- Psychological stress - which may be the result of the death of a spouse, the departure of children from the home, boredom with marriage, or a sense of lost youth and approaching death.

Middle Age Is a "Dangerous Age"

Middle age can be dangerous as it is a time when individuals break down physically as a result of overwork, over worry, or careless living. The incidence of mental illness rises rapidly in middle age among both men and women, and it is also a peak age for suicides, especially among men. The threats to good adjustment that make middle age dangerous are intensified by sex differences in the time when upsets in physical and psychological homeostasis occur. The so-called "middle-age revolt" of men usually coincides with the upsets in homeostasis caused by the menopause in women. This not only strains the husband-wife relationship, sometimes leading to separation or divorce, but it often predisposes both men and women to physical and mental illness, alcoholism, drug addiction, and suicide.

Middle Age Is an "Awkward Age"

Just as adolescents are neither children nor adults, so middle-aged men and women are no longer "young" nor are they yet "old." Feeling that, they have no recognized place in society, middle-aged people try to be as inconspicuous as possible. The desire of middle-aged men and women be inconspicuous is reflected in their clothing. Most middle-aged people try to dress as conservatively as possible and yet adhere to the prevailing styles.

Middle Age Is a Time of Achievement

According to Erikson, it is , a crisis age in which either "generativity" the tendency to produce-or "stagnation" the tendency to stand still will dominate. During middle age, people either become more and more successful or they stand still and accomplish nothing more. If middle-aged people have a strong desire to succeed, they will reach their

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peak at this time and reap the benefits of the years of preparation and hard work that preceded it. Middle age should be a time not only for financial and social success but also for authority and prestige.

Normally, men reach their peak between forty and fifty years, after which they rest on their laurels and enjoy the benefits of their hard-won successes until they reach the early sixties when they are regarded as "too old" and usually must relinquish their jobs to younger and more vigorous workers. Earnings normally reach a peak in middle age. Middle age is the period when leadership roles for men and women in business, industry, and community organizations are the reward for achievement. Most organizations, especially the older ones, elect presidents who are in their fifties and older. The fifties are also the years when individuals are granted recognition from various professional societies.

Middle Age Is a Time of Evaluation

The seventh characteristic of middle age is that it is mainly a time of self-evaluation. Because middle age is when men and women normally reach their peaks of achievement, it is logical that it also would be the time when they would evaluate their accomplishments in light of their earlier aspirations and the expectations of others, especially family members and friends. Archer has pointed out, "It is in the twenties that we commit ourselves to an occupation and to a marriage. During the late thirties and early forties, it is common for men to review those early commitments".

Middle Age Is Evaluated by a Double Standard

The eighth characteristic of middle age is that it is evaluated by a double standard, a standard for men and a standard for women. In spite of the growing trend toward egalitarian roles for men and women in the home, in business, industry, the professions, and in social life, there still exists a double standard regarding aging. While this double standard affects many aspects of the lives of middle-aged men and women, two are especially common. The first relates to physical changes. When men's hair becomes gray, when they develop lines and wrinkles on their faces and a middle-aged pouch in place of a once-slender waistline, they are usually regarded as "distinguished." Similar physical changes in women are judged as unattractive with major emphasis on the "middle-age spread."

The second area in which the double standard is apparent is in the approved way for members of the two sexes to age. There are two different philosophies about how people should adjust to middle age: one, that they should stay young and active and, two, that they should grow old gracefully, deliberately slowing down and taking life comfortably-this is the "rocking-chair" philosophy. Women, on the whole, are more likely to adopt the rocking-chair philosophy than men, though this holds true more for women of the lower class than for the upper-middle and upper classes.

Middle Age Is the Time of the Empty Nest

The ninth characteristic of middle age is that it is the time of the empty nest the time when the children no longer want to live under the parental roof. Except in cases where men and women marry later than the average age or postpone having their children until they are

well established in their careers or have large families spread out over a decade or more of time, middle age is the "empty nest" stage in marital lives. For most families of today, the empty nest stage begins in the forties, though, with late marriage and parenthood, or with large numbers of children, it may not begin until the mid- or late fifties. The empty nest period of middle age is far more traumatic for women than for men. This is especially true of women who have devoted their adult years to homemaking and who have few interests or resources to fill their time when their homemaking jobs lessen or come to an end. Many experiences a "retirement shock" similar to that experienced by men when they retire.

Middle Age Is a Time of Boredom

The tenth characteristic of middle age is that it is often a time of boredom. Many, if not most, men and women experience boredom during the late thirties and forties. Men become bored with the daily routine of work and with a family life that offers little excitement. Women, who have spent most of their adulthood caring for the home and raising children, wonder what they will do for the next twenty or thirty years. At no age is boredom conducive to happiness or even contentment. Consequently, middle age is often one of the unhappy periods of life. In a study of pleasant and unpleasant memories over a span of years, adults rated middle age, especially the years from forty to forty-nine, as the least pleasant. Only the years after sixty did they find nearly as unpleasant.

2.5 PHYSICAL CHANGES

1. **Hair:** When asked to imagine someone in middle adulthood, we often picture someone with the beginnings of wrinkles and gray or thinning hair. What accounts for these physical changes?

   

   Hair color is due to a pigment called melanin which is produced by hair follicles (Martin, 2014). With aging, the hair follicles produce less melanin, and this causes the hair to become gray. Hair color typically starts turning lighter at the temples, but eventually, all the hair will become white. For many, graying begins in the 30s, but it is largely determined by your genes. Gray hair occurs earlier in white people and later in Asians.

   Genes also determine how much hair remains on your head. Almost everyone has some hair loss with aging, and the rate of hair growth slows with aging. Many hair follicles stop producing new hairs and hair strands become smaller. Men begin showing signs of balding by 30 and some are nearly bald by 60. Male-pattern baldness is related to testosterone and is identified by a receding hairline followed by hair loss at the top of the head. Figure shows tennis champion Andre Agassi's characteristic male- patterned baldness. Women can also develop female- patterned baldness as their hair becomes less dense and the scalp becomes visible (Martin, 2014). Sudden hair loss, however, can be a symptom of a health problem.

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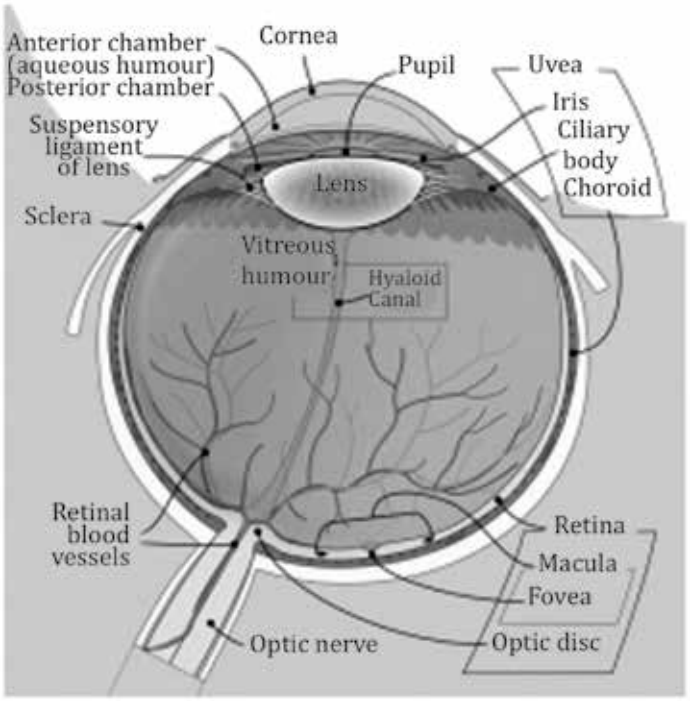
2. **Skin:** Skin continues to dry out and is prone to more wrinkling, particularly on the sensitive face area. Wrinkles, or creases in the skin, are a normal part of aging. As we get older, our skin dries and loses the underlying layer of fat, so our face no longer appears smooth. Loss of muscle tone and thinning skin can make the face appear flabby or drooping. Although wrinkles are a natural part of aging and genetics plays a role, frequent sun exposure and smoking will cause wrinkles to appear sooner. Dark spots and blotchy skin also occur as one ages and are due to exposure to sunlight (Moskowitz, 2014). Blood vessels become more apparent as the skin continues to dry and get thinner.
3. **Sarcopenia:** The loss of muscle mass and strength that occurs with aging is referred to as sarcopenia (Morley, Baumgartner, Roubenoff, Mayer, & Nair, 2001). Sarcopenia is thought to be a significant factor in the frailty and functional impairment that occurs when older. The decline of growth and anabolic hormones, especially testosterone, and decreased physical activity have been implicated as causes of sarcopenia (Proctor, Balagopal, & Nair, 1998). This decline in muscle mass can occur as early as 40 years of age and contributes significantly to a decrease in life quality, increase in health care costs, and early death in older adults (Karakelides & Nair, 2005). Exercise is certainly important to increase strength, aerobic capacity, and muscle protein synthesis, but unfortunately it does not reverse all the age-related changes that occur. The muscle-to-fat ratio for both men and women also change throughout middle adulthood, with an accumulation of fat in the stomach area.
4. **Lungs:** The lungs serve two functions: Supply oxygen and remove carbon dioxide. Thinning of the bones with age can change the shape of the rib cage and result in a loss of lung expansion. Age-related changes in muscles, such as the weakening of the diaphragm, can also reduce lung capacity. Both of these changes will lower oxygen levels in the blood and increase the levels of carbon dioxide. Experiencing shortness of breath and feeling tired can result (NIH, 2014b). In middle adulthood, these changes and their effects are often minimal, especially in people who are non-smokers and physically active. However, in those with chronic bronchitis, or who have experienced frequent pneumonia, asthma other lung-related disorders, or who are smokers, the effects of these normal age changes can be more pronounced.

2.6 SENSORY CHANGES

1. **Vision:** A normal change of the eye due to age is presbyopia, which is Latin for "old vision." It refers to a loss of elasticity in the lens of the eye that makes it harder for the eye to focus on objects that are closer to the person. When we look at something far away, the lens flattens out; when looking at nearby objects tiny muscle fibers around the lens enable the eye to bend the lens. With age these muscles weaken and can no longer accommodate the lens to focus the light. Anyone over the age of 35 is at risk for developing presbyopia. According to the National Eye Institute (NEI) (2016), signs that someone may have presbyopia include:
   - Hard time reading small print
   - Having to hold reading material farther than arm's distance
   - Problems seeing objects that are close

- Headaches
- Eyestrain



Another common eye problem people experience as they age are floaters, little spots or "cobwebs" that float around the field of vision. They are most noticeable if you are looking at the sky on a sunny day, or at a lighted blank screen. Floaters occur when the vitreous, a gel-like substance in the interior of the eye, slowly shrinks. As it shrinks, it becomes somewhat stringy, and these strands can cast tiny shadows on the retina. In most cases, floaters are harmless, more of an annoyance than a sign of eye problems. However, floaters that appear suddenly, or that darken and obscure vision can be a sign of more serious eye problems, such a retinal tearing, infection, or inflammation. People who are very nearsighted (myopic), have diabetes, or who have had cataract surgery are also more likely to have floaters (NEI, 2009).

During midlife, adults may begin to notice a drop in scotopic sensitivity, the ability to see in dimmer light. By age 60, the retina receives only one third as much light as it did at age 20, making working in dimmer light more difficult (Jackson & Owsley, 2000). Night vision is also affected as the pupil loses some of its ability to open and close to accommodate drastic changes in light. Eyes become more sensitive to glare from headlights and street lights making it difficult to see people and cars, and movements outside of our direct line of sight (NIH, 2016c).

Finally, some people experience dry eye syndrome, which occurs when the eye does not produce tears properly, or when the tears evaporate too quickly because they are not the correct consistency (NEI, 2013). While dry eye can affect people at any age, nearly 5 million Americans over the age of 50 experience dry eye. It affects women more than men, especially after menopause. Women who experienced early menopause may be more likely to experience dry eye, which can cause surface damage to the eye.

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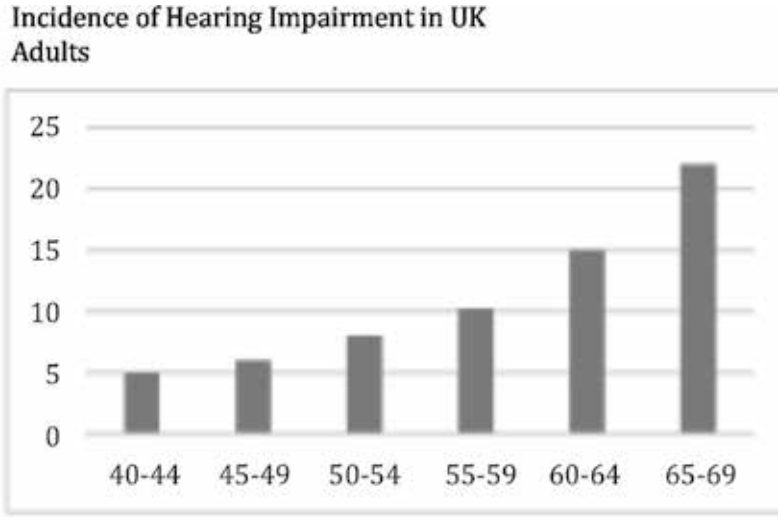
2. **Hearing:** Hearing problems increase during middle adulthood. According to a recent UK study (Dawes et al., 2014), the rate of hearing problems in their sample doubled between the ages of 40 and 55 and tripled by age 64. Similar statistics are found in U.S. samples of middle-aged adults. Prior to age 40, about 5.5% of adults report hearing problems. This jumps to 19% among 40- to 69-year-olds (American Psychological Association, 2016). Middle-aged adults may experience more problems understanding speech when in noisy environments, in comparison to younger adults (Füllgrabe, Moore, & Stone, 2015; Neidleman, Wambacq, Besing, Spitzer, & Koehnke, 2015).

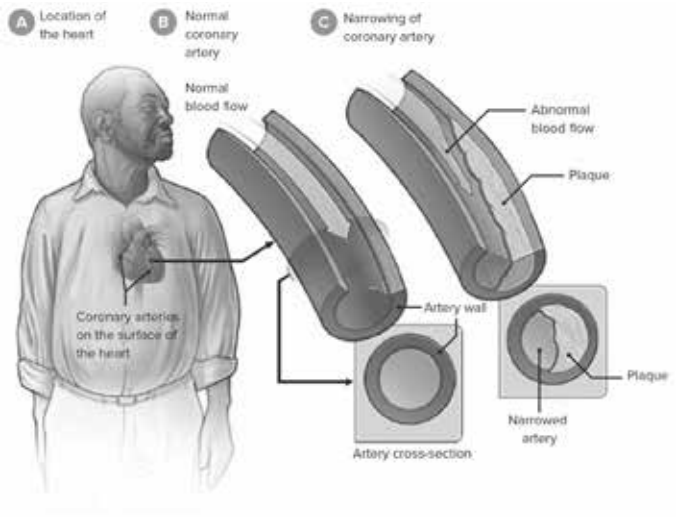
   As we age, we also lose the ability to hear higher frequencies (Humes, Kewley-Port, Fogerty, & Kinney, 2010). Hearing changes are more common among men than women, but males may underestimate their hearing problems (Uchida, Nakashima, Ando, Niino, & Shimokata, 2003). For many adults, hearing loss accumulates after years of being exposed to intense noise levels. Men are more likely to work in noisy occupations. Hearing loss is also exacerbated by cigarette smoking, high blood pressure, diabetes, and stroke. Most hearing loss could be prevented by guarding against being exposed to extremely noisy environments.



2.7 HEALTH CONCERNS

Heart Disease: According to the most recent National Vital Statistics Reports (Kochanek, Murphy, Xu, & Arias, 2019) heart disease continues to be the number one cause of death for Americans as it claimed 23% of those who died in 2017. It is also the number one cause of death worldwide (World Health Organization, 2018). Heart disease develops slowly over time and typically appears in midlife (Hooker & Pressman, 2016).

Heart disease can include heart defects and heart rhythm problems, as well as narrowed, blocked, or stiffened blood vessels referred to as a cardiovascular disease. The blocked blood vessels prevent the body and heart from receiving adequate blood. Atherosclerosis, or a build-up of fatty plaque in the arteries, is the most common cause of cardiovascular disease. The plaque buildup thickens the artery walls and restricts the blood flow to organs and tissues. Cardiovascular disease can lead to a heart attack, chest pain (angina), or stroke (Mayo Clinic, 2014a). Figure illustrates atherosclerosis.



Symptoms of cardiovascular disease differ for men and women. Males are more likely to suffer chest pain, while women are more likely to demonstrate shortness of breath, nausea, and extreme fatigue. Symptoms can also include pain in the arms, legs, neck, jaw, throat, abdomen or back (Mayo Clinic, 2014a). According to the Mayo Clinic (2014a) there are many risk factors for developing heart disease, including medical conditions, such as high blood pressure, high cholesterol, diabetes, and obesity. Other risk factors include:

- **Advanced Age**-increased risk for narrowed arteries and weakened or thickened heart muscle.
- **Sex**-males are at greater risk, but a female's risk increases after menopause.
- **Family History**-increased risk, especially if male parent or brother developed heart. disease before age 55 or female parent or sister developed heart disease before age 65.
- **Smoking**-nicotine constricts blood vessels and carbon monoxide damages the inner lining.
- **Poor Diet**-a diet high in fat, salt, sugar, and cholesterol.
- Excessive Alcohol Consumption-alcohol can raise the level of bad fats in the blood and increase blood pressure
- **Stress**-unrelieved stress can damage arteries and worsen other risk factors.
- **Poor Hygiene**-establishing good hygiene habits can prevent viral or bacterial infections that can affect the heart. Poor dental care can also contribute to heart disease.

Complications of heart disease can include heart failure, when the heart cannot pump enough blood to the meet the body's needs, and a heart attack, such as when a blood clot blocks the blood flow to the heart. This blockage can damage or destroy a part of the heart muscle, and atherosclerosis is a factor in a heart attack. Treatment for heart disease includes medication, surgery, and lifestyle changes including exercise, healthy diet, and refraining from smoking.

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Sudden cardiac arrest is the unexpected loss of heart functioning, breathing, and consciousness, often caused by an arrhythmia or abnormal heartbeat. The heartbeat may be too quick, too slow, or irregular. With a healthy heart, it is unlikely for a fatal arrhythmia to develop without an outside factor, such as an electric shock or illegal drugs. If not treated immediately, sudden cardiac arrest can be fatal and result in sudden cardiac death.

Hypertension, or high blood pressure, is a serious health problem that occurs when the blood flows with a greater force than normal. One in three American adults (70 million people) have hypertension and only half have it under control (Nwankwo, Yoon, Burt, & Gu, 2013). It can strain the heart, increase the risk of heart attack and stroke, or damage the kidneys (CDC, 2014a). Uncontrolled high blood pressure in early and middle adulthood can also damage the brain's white matter (axons) and may be linked to cognitive problems later in life (Maillard et al., 2012). Normal blood pressure is under 120/80 (see Table). The first number is the systolic pressure, which is the pressure in the blood vessels when the heartbeats. The second number is the diastolic pressure, which is the pressure in the blood vessels when the heart is at rest. High blood pressure is sometimes referred to as the silent killer, as most people with hypertension experience no symptoms. Making positive lifestyle changes can often reduce blood pressure.

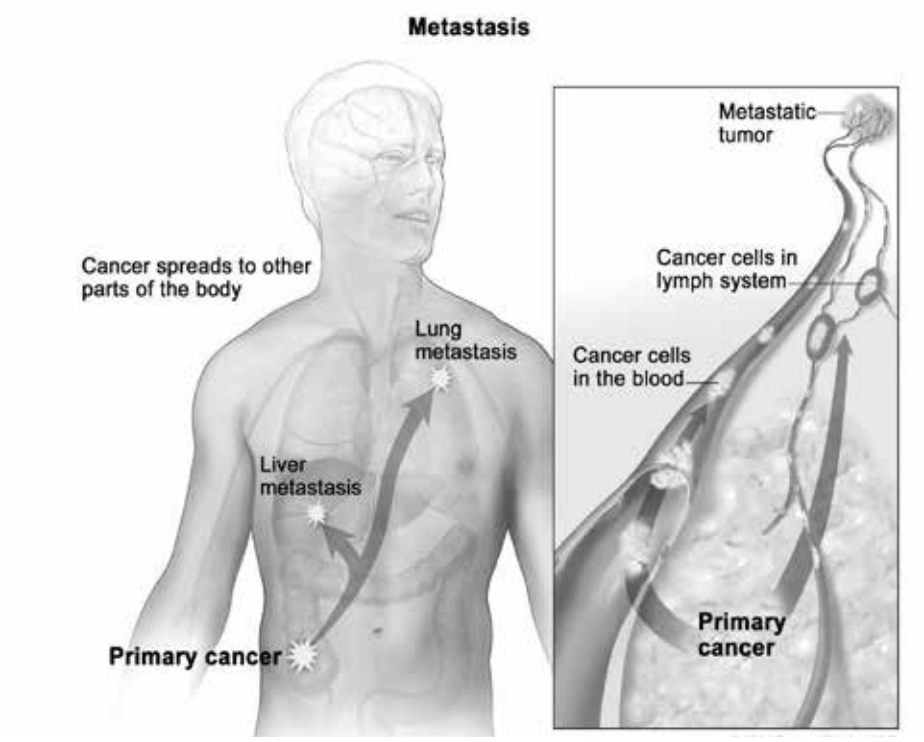
	Systolic Pressure	Diastolic Pressure
Normal	Under 120	Under 80
Elevated	120-129	Under 80
Hypertension Stage 1	130-139	80-89
Hypertension Stage 2	>140	>90

Risk factors for high blood pressure include:

- Family history of hypertension
- A diet that is too high in sodium often found in processed foods, and too low in potassium
- Sedentary lifestyle and Obesity
- Too much alcohol consumption
- Tobacco use, as nicotine raises blood pressure (CDC, 2014b)

Cancer: After heart disease, cancer was the second leading cause of death for Americans in 2017 as it accounted for 21.3% of all deaths (Kochanek et al., 2016). According to the National Institutes of Health (2015), cancer is the name given to a collection of related diseases in which the body's cells begin to divide without stopping and spread into surrounding tissues. These extra cells can divide, and form growths called tumors, which are typically masses of tissue. Cancerous tumors are malignant, which means they can invade nearby tissues. When removed malignant tumors may grow back. Unlike malignant tumors, benign tumors do not invade nearby tissues. Benign tumors can sometimes be quite large, and when removed usually do not grow back. Although benign tumors in the body are not cancerous, benign brain tumors can be life-threatening.

Cancer cells can prompt nearby normal cells to form blood vessels that supply the tumors with oxygen and nutrients, which allows them to grow. These blood vessels also remove waste products from the tumors. Cancer cells can also hide from the immune system, a network of organs, tissues, and specialized cells that protects the body from infections and other conditions. Lastly, cancer cells can metastasize, which means they can break from where they first formed, called primary cancer, and travel through the lymph system or blood to form new tumors in other parts of the body. This new metastatic tumor is the same type as the primary tumor (National Institutes of Health, 2015). Figure illustrates how cancers can metastasize.



Cancer can start almost anywhere in the human body. While normal cells mature into very distinct cell types with specific functions, cancer cells do not and continue to divide without stopping. Further, cancer cells are able to ignore the signals that normally tell cells to stop dividing or to begin a process known as programmed cell death which the body uses to get rid of unneeded cells. With the growth of cancer cells, normal cells are crowded out and the body is unable to work the way it is supposed to. For example, the cancer cells in lung cancer form tumors which interfere with the functioning of the lungs and how oxygen is transported to the rest of the body.

There are more than 100 types of cancer. The American Cancer Society assembles a list of the most common types of cancers in the United States. To qualify for the 2016 list, the estimated annual incidence had to be 40, 000 cases or more. The most common type of cancer on the list is breast cancer, with more than 249,000 new cases expected in 2016. The next most common cancers are lung cancer and prostate cancer. Table lists the estimated number of new cases and deaths for each common cancer type for 2019 (American Cancer Society, 2019).

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Cancer Type	Estimated New Cases	Estimated Deaths
Bladder	80,470	17,670
Breast (Female – Male)	268,600-2670	41,760-500
Colon	101,420	51,020
Kidney and Renal Pelvis	73,820	14,770
Leukemia (All Types)	61,780	22,840
Lung (Including Bronchus)	228,150	142,670
Melanoma	32,110	12,960
Non-Hodgkin Lymphoma	74,200	19,970
Pancreatic	56,770	45,750
Prostate	174,650	31,620
Thyroid	52,070	2,170
Uterine	75,050	16,410

Cholesterol is a waxy fatty substance carried by lipoprotein molecules in the blood. It is created by the body to create hormones and digest fatty foods and is also found in many foods. Your body needs cholesterol, but too much can cause heart disease and stroke. Two important kinds of cholesterol are low-density lipoprotein (LDL) and high-density lipoprotein (HDL). The third type of fat is called triglycerides. Your total cholesterol score is based on all three types of lipids (see Table). Total cholesterol is calculated by adding HDL plus LDL plus 20% of the Triglycerides.

	Normal
Total Cholesterol	Less than 200mg/dl*
LDL	Less than 100mg/dl
HDL	40mg/dl or higher
Triglycerides	Less than 150mg/dl

***Cholesterol levels are measured in milligrams (mg) of cholesterol per deciliter (dl) of blood.**

LDL cholesterol makes up the majority of the body's cholesterol, however, it is often referred to as "bad" cholesterol because at high levels it can form plaque in the arteries leading to heart attack and stroke. HDL cholesterol often referred to as "good" cholesterol, absorbs cholesterol and carries it back to the liver, where it is then flushed from the body. Higher levels of HDL can reduce the risk of heart attack and stroke. Triglycerides are a type of fat in the blood used for energy. High levels of triglycerides can also increase your risk for heart disease and stroke when coupled with high LDL and low HDL. All adults 20 or older should have their cholesterol checked. In early adulthood, doctors may check every few years if the numbers have previously been normal, and there are no other signs of heart disease. In middle adulthood, this may become part of the annual check-up (CDC, 2015).

Risk factors for high cholesterol include: A family history for high cholesterol, diabetes, a diet high in saturated fats, trans fat, and cholesterol, physical inactivity, and obesity. Almost 32% of American adults have high LDL cholesterol levels, and the majority do not have it under control, nor have they made lifestyle changes (CDC, 2015).

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Diabetes (Diabetes Mellitus) is a disease in which the body does not control the amount of glucose in the blood. This disease occurs when the body does not make enough insulin or does not use it the way it should (NIH, 2016a). Insulin is a type of hormone that helps glucose in the blood enter cells to give them energy. In adults, 90% to 95% of all diagnosed cases of diabetes are type 2 (American Diabetes Association (ADA), 2016). Type 2 diabetes usually begins with insulin resistance, a disorder in which the cells in the muscles, liver, and fat tissue do not use insulin properly (CDC, 2014d). As the need for insulin increases, cells in the pancreas gradually lose the ability to produce enough insulin. In some Type 2 diabetics, pancreatic beta cells will cease functioning, and the need for insulin injections will become necessary. Some people with diabetes experience insulin resistance with only minor dysfunction of the beta-cell secretion of insulin. Other diabetics experience only slight insulin resistance, with the primary cause being a lack of insulin secretion (CDC, 2014d).

One in three adults are estimated to have prediabetes, and 9 in 10 of them do not know. According to the CDC (2014d) without intervention, 15% to 30% of those with prediabetes will develop diabetes within 5 years. In 2015, 30.2 million people (9.4% of the population) were living with diabetes in America, mostly adults age 18 and up (CDC, 2017). Table 8.4 shows the numbers in millions and percentage of adults, by age and gender, with both diagnosed and undiagnosed diabetes. The median age of diagnosis is 54 (CDC, 2014d). During middle adulthood, the number of people with diabetes dramatically increases; with 4.3 million living with diabetes prior to age 45, to over 13 million between the ages of 45 to 64; a four-fold increase. Men are slightly more likely to experience diabetes than are women.

Characteristic	Diagnosed diabetes No. in millions (95% CL)[2]	Undiagnosed diabetes No. in millions (95% Cl)[2]	Total diabetes No. in millions (95% Cl)[2]
Total	23.0(21.1-25.1)	7.2 (6.1-8.6)	30.2 (27.9-32.7)
Age in years			
18-44	3.0 (2.6-3.6)	1.6(1.1-2.3)	4.6 (3.8-5.5)
45-64	10.7(9.3-12.2)	3.6(2.8-4.6)	14.3 (12.7-16.1)
65	9.9 (9.0-11.0)	2.1 (1.4-3.0)	12.0 (10.7-13.4)

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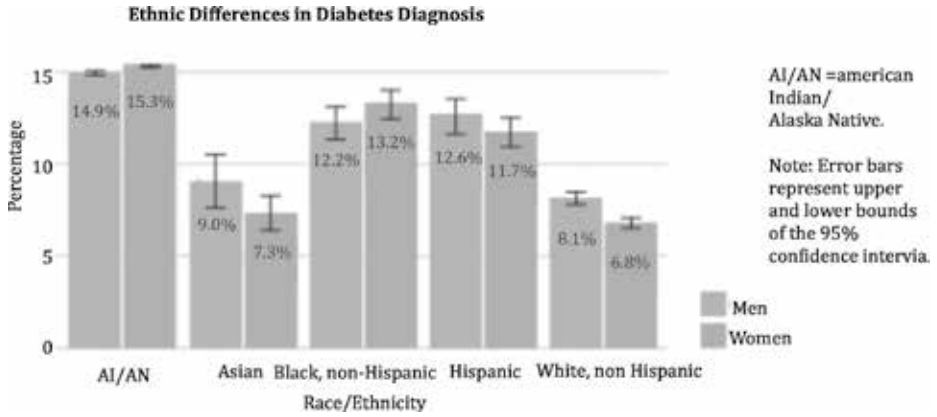
Sex			
Woman	11.7 (10.5-13.1)	3.1 (2.4-4.1)	14.9 (13.5-16.4)
Men	11.3 (10.2-12.4)	4.0 (3.0-5.2)	15.3 (13.8-17.0)



Diabetes also affects ethnic and racial groups differently. Non-Hispanic Whites are less likely to be diagnosed with diabetes than are Asian Americans, Hispanics, non-Hispanic Blacks, and American Indians/Alaskan Natives. However, these general figures hide the variations within these groups. For instance, the rate of diabetes was less for Central, South, and Cuban Americans than for Mexican Americans and Puerto Ricans, and less for Alaskan Natives than the American Indians of southern Arizona (CDC, 2017). Additionally, educational attainment, which is linked to one's economic level, is correlated with diabetes. Percentages includes: Less than a high school degree (21.6%), high school degree (9.5%), and more than a high school degree (7.2%).

The risk factors for diabetes include:

- Those over age 45
- Obesity
- Family history of diabetes
- History of gestational diabetes
- Race and ethnicity
- Physical inactivity
- Diet.

Diabetes has been linked to numerous health complications. Adults with diabetes are 1.7 times more likely to have cardiovascular disease, 1.8 times more likely to experience a heart attack, and 1.5 times more likely to experience stroke than adults without diabetes. Diabetes can cause blindness and other eye problems. Between 40%-45% of Americans with diabetes have some degree of diabetic retinopathy, which is damage to the small blood vessels in the retina that may lead to loss of vision (NEI, 2015). More than 4% showed advanced diabetic retinopathy. Diabetes is linked as the primary cause of almost half (44%) of new cases of kidney failure each year. About 60% of non-traumatic limb

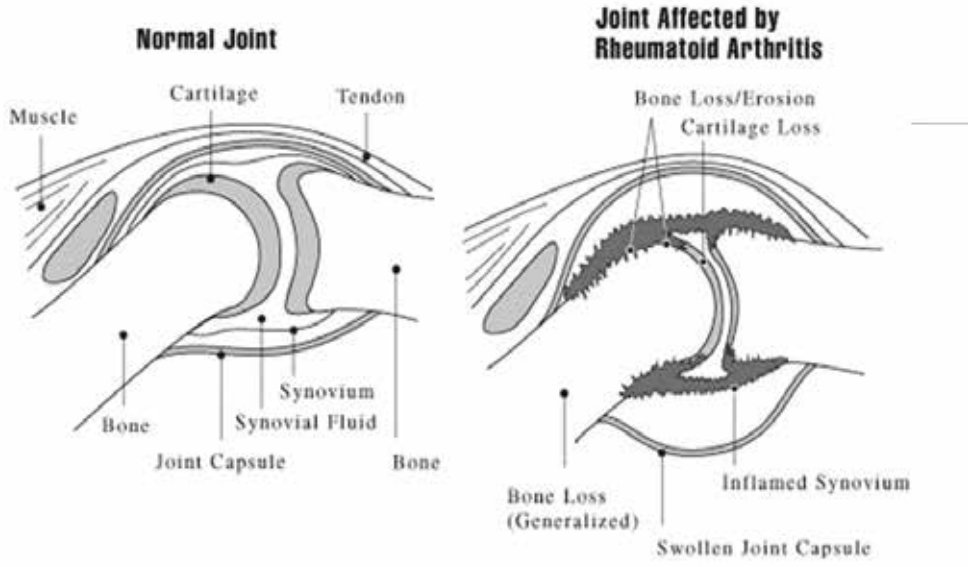
amputations occur in people with diabetes. Diabetes has been linked to hearing loss, tinnitus (ringing in the ears), gum disease, and neuropathy (nerve disease) (CDC, 2014d).

Typical tests for diabetes include a fasting glucose test and the A1C (See Table). Fasting glucose levels should be under 100mg/dl (ADA, 2016). The A1C provides information about the average levels of blood glucose over the last 3 months (NIH, 2014a). The A1C should be under 5.7, where a 5.0 = 97mg/dl and a 6.0 = 126 mg/dl (ADA, 2016).

	Normal	Prediabetes	Diabetes
Fasting Glucose	Below 100mg/dl	100-125mg/dl	126mg/dl +
A1C	Under 5.7	5.7-6.9	7+

Metabolic Syndrome is a cluster of several cardiometabolic risk factors, including large waist circumference, high blood pressure, and elevated triglycerides, LDL, and blood glucose levels, which can lead to diabetes and heart disease (Crist et al., 2012). The prevalence of metabolic syndrome in the U.S. is approximately 34% and is especially high among Hispanics and African Americans (Ford, Li, & Zhao, 2010). Prevalence increases with age, peaking in one's 60s (Ford et al., 2010). Metabolic syndrome increases morbidity from cardiovascular disease and diabetes (Hu et al., 2004; Malik, 2004). Hu and colleagues found that even having one or two of the risk factors for metabolic syndrome increased the risk of mortality. Crist et al. (2012) found that increasing aerobic activity and reducing weight led to a drop in many of the risk factors of metabolic syndrome, including a reduction in waist circumference and blood pressure, and an increase in HDL cholesterol.

Rheumatoid arthritis (RA) is an inflammatory disease that causes pain, swelling, stiffness, and loss of function in the joints (NIH, 2016b). RA occurs when the immune system attacks the membrane lining the joints (see Figure). RA is the second most common form of arthritis after osteoarthritis, which is the normal wear and tear on the joints. Unlike osteoarthritis, RA is symmetric in its attack of the body, thus, if one shoulder is affected so is the other. In addition, those with RA may experience fatigue and fever. Below are the common features of RA (NIH, 2016b).



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Features of Rheumatoid Arthritis

- Tender, warm, swollen joints
- Symmetrical pattern of affected joints
- Joint inflammation often affecting the wrist and finger joints closest to the hand
- Joint inflammation sometimes affecting other joints, including the neck, shoulders, elbows, hips, knees, ankles, and feet
- Fatigue, occasional fevers, a loss of energy
- Pain and stiffness lasting for more than 30 minutes in the morning or after a long rest
- Symptoms that last for many years
- Variability of symptoms among people with the disease.

About 1.5 million people (approximately 0.6%) of Americans experience rheumatoid arthritis. It occurs across all races and age groups, although the disease often begins in middle adulthood and occurs with increased frequency in older people. Like some other forms of arthritis, rheumatoid arthritis occurs much more frequently in women than in men. About two to three times as many women as men have the disease (NIH, 2016b). The lifetime risk for RA for women is 3.6% and 1.7% for men (Crowson, et al., 2011).

Genes play a role in the development of RA. However, individual genes by themselves confer only a small risk of developing the disease, as some people who have these particular genes never develop RA. Scientists think that something must occur to trigger the disease process in people whose genetic makeup makes them susceptible to rheumatoid arthritis. For instance, some scientists also think hormonal factors may be involved. In women who experience RA, the symptoms may improve during pregnancy and flare after pregnancy. Women who use oral contraceptives may increase their likelihood of developing RA. This suggests hormones, or possibly deficiencies or changes in certain hormones, may increase the risk of developing RA in a genetically susceptible person (NIH, 2016b).

Rheumatoid arthritis can affect virtually every area of a person's life, and it can interfere with the joys and responsibilities of work and family life. Fortunately, current treatment strategies allow most people with RA to lead active and productive lives. Pain-relieving drugs and medications can slow joint damage and establishing a balance between rest and exercise can also lessen the symptoms of RA (NIH, 2016b).

Fatty liver disease (hepatic steatosis) refers to the accumulation of fat in the liver. The liver normally contains little fat, and anything below 5% of liver weight is considered normal. This disease is present in 33% of American adults. In the past, the main cause of fat accumulation in the liver was due to excessive alcohol consumption, often eventually leading to cirrhosis and liver failure. Today, increased caloric intake, especially resulting in obesity, and little physical activity are the main causes. Mild to moderate levels of hepatic steatosis can be reversed through healthy lifestyle changes (Nassir, Rector, Hammoud, & Ibdah, 2015).

Digestive Issues

Heartburn, also called acid indigestion or pyrosis, is a common digestive problem in adults and is the result of stomach acid backing up into the esophagus. Prolonged contact with the digestive juices injures the lining of the esophagus and causes discomfort. Heartburn that occurs more frequently may be due to gastroesophageal reflux disease or GERD. Normally the lower sphincter muscle in the esophagus keeps the acid in the stomach from entering the esophagus. In GERD this muscle relaxes too frequently and the stomach acid flows into the esophagus. In the U.S., 60 million people experience heartburn at least once a month, and 15 million experience it every day. Prolonged problems with heartburn can lead to more serious complications, including esophageal cancer, one of the most lethal forms of cancer in the U.S. Problems with heartburn can be linked to eating fatty or spicy foods, caffeine, smoking, and eating before bedtime (American College of Gastroenterology, 2016a).

2.8 INTELLECTUAL DEVELOPMENT

Cross-sectional studies of IQ show young adults performing better than middle or older adults, while longitudinal studies of IQ tend to show the same people increasing in intelligence at least until their 50s. The results of the cross-sectional studies may be due more to cohort influences: the effects of practice, increased comfort taking such tests, and the tendency for those who remain in the studies to perform better than those who drop out.

Young adults score higher on tests of fluid intelligence, which is the ability to think abstractly and deal with novel situations, while middle adults improve over time on tests of crystallized intelligence, which involves using learned information collected throughout a life span. In summary, the results of traditional IQ tests imply that intelligence continues at approximately the same level at least into middle adulthood, and probably beyond.

1. **Thinking patterns**

   Middle-age adult thinking differs significantly from that of adolescents and young adults. Adults are typically more focused in specific directions, having gained insight and understanding from life events that adolescents and young adults have not yet experienced. No longer viewing the world from an absolute and fixed perspective, middle adults have learned how to make compromises, question the establishment, and work through disputes. Younger people, on the hand, may still look for definitive answers.

   Many middle-aged adults have attained Piaget's stage of formal operations, which is characterized by the ability to think abstractly, reason logically, and solve theoretical problems. Many of the situations facing adults today require something more than formal operations. That is, the uncertain areas of life may pose problems too ambiguous and inconsistent for such straightforward thinking styles. Instead, middle adults may develop and employ postformal thinking, which is characterized by the objective use of practical common sense to deal with unclear problems. An example of postformal thinking is the middle adult who knows from experience how to maneuver through rules and regulations and play the system at the office. Another example is the middle adult who accepts the reality of contradictions in his or her religion, as opposed to the adolescent

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who expects a concrete truth in an infallible set of religious doctrines and rules. Postformal thinking begins late in adolescence and culminates in the practical wisdom so often associated with older adulthood.

2. Adult learners

Does intellectual development stop at age 22? Not at all. In fact, in recent years, colleges and universities have reported an increased abelling of adult learners—students age 25 or older. Of course, abelling this age group as adult learners is not to imply that the typical college student is not also an adult. Academic institutions typically identify those outside the 18–21 range as adults, because most have been working and rearing families for some time before deciding to enter or reenter college. Compared with younger students, adult learners may also have special needs: anxiety or low self-confidence about taking classes with younger adults, feelings of academic isolation and alienation, fears of not fitting in, or difficulties juggling academic, work, and domestic schedules.

Adults most often choose to go to college for work-related purposes. Many employers require workers to attain certain levels of education in order to qualify for promotions. Other workers go to college to learn new skills in preparation for another career. Additionally, certain organizations, such as state licensing boards, may require professionals to have a certain number of continuing education hours each year to maintain their licenses. Finally, adults may also return to college simply for personal enrichment.

Many adults today choose **distance education** as their primary learning method. Numerous educational institutions offer accredited courses, certificates, and undergraduate and graduate degrees by correspondence or via alternative learning formats, such as intensive study classes conducted one weekend per month, telecourses provided over the television, or virtual classrooms set up on the Internet. Some of the programs have minimal **residency requirements** (time actually spent on campus); others do not, which benefits adults in rural areas who use these alternative methods to access studies that were previously unavailable to them. Adult students who successfully complete external programs tend to be highly self-motivated and goal-oriented.

2.9 CHAPTER SUMMARY

During middle adulthood, the aging process becomes more apparent. Around the age of 60, the eyes lose their ability to adjust to objects at varying distances, known as presbyopia. Most people between the ages of 40 and 60 will need some form of corrective lenses for vision deficits. Middle-aged adults are also at higher risk than younger adults for certain eye problems, such as glaucoma. The age at which middle-aged people married, the time when they became parents, and the number of children they have all influence the age at which they must adjust to the developmental tasks relating to family life, to civic and social responsibilities, and to adjust leisure-time activities. The first characteristic of middle age is that it is a dreaded period in the life span. It is recognized that, next to old age, it is the most dreaded period in the total life span. Men and women have many reasons, that seem valid to them-for dreading middle age. Among these are the many unfavorable stereotypes about middle-aged people, the traditional beliefs concerning the mental and physical deterioration that are believed to accompany the cessation of reproductive life, and the emphasis on the importance of youth as compared with the

reverence for age found in many other cultures. Heart disease can include heart defects and heart rhythm problems, as well as narrowed, blocked, or stiffened blood vessels referred to as a cardiovascular disease. The blocked blood vessels prevent the body and heart from receiving adequate blood. Cancer cells can prompt nearby normal cells to form blood vessels that supply the tumors with oxygen and nutrients, which allows them to grow. These blood vessels also remove waste products from the tumors. Cancer cells can also hide from the immune system, a network of organs, tissues, and specialized cells that protects the body from infections and other conditions. Young adults score higher on tests of fluid intelligence, which is the ability to think abstractly and deal with novel situations, while middle adults improve over time on tests of crystallized intelligence, which involves using learned information collected throughout a life span. In summary, the results of traditional IQ tests imply that intelligence continues at approximately the same level at least into middle adulthood, and probably beyond.

2.10 REVIEW QUESTIONS

SHORT ANSWER TYPE QUESTIONS

1. **What do you understand by middle adulthood?**
2. **Middle age is a dreaded period. Explain.**
3. **Enlist the features of rheumatoid arthritis.**
4. **How do digestive issues affect middle age?**
5. **Explain thinking patterns in middle age.**

LONG ANSWER TYPE QUESTIONS

1. **What are the developmental tasks of middle age?**
2. **Enlist the characteristics of middle adulthood.**
3. **What are the physical changes in middle adulthood?**
4. **Elaborate on the sensory changes.**
5. **Write a brief note on intellectual development in middle adulthood.**

2.11 MULTIPLE CHOICE QUESTIONS

1. **During _____, the aging process becomes more apparent.**
   a. Middle age
   b. Early adulthood
   c. Old age
   d. None of the above

2. **Middle age is the time when men and women leave behind the physical and behavioral characteristics of adulthood and enter a period of life when new physical and behavioral characteristics will prevail:**
   a. Middle Age Is a Dreaded Period
   b. Middle Age Is a Time of Transition
   c. Middle Age Is a Time of Stress
   d. Middle Age Is a Time of Evaluation

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3. Radical adjustments to changing roles and patterns of life, especially when accompanied by physical changes, always tend to disrupt the individual's physical and psychological homeostasis and lead to a period of stress-a time:

a. Middle Age Is a Dreaded Period
b. Middle Age Is a Time of Transition
c. Middle Age Is a Time of Stress
d. Middle Age Is a Time of Evaluation

4. Because middle age is when men and women normally reach their peaks of achievement, it is logical that it also would be the time when they would evaluate their accomplishments in light of their earlier aspirations and the expectations of others:

a. Middle Age Is a Dreaded Period
b. Middle Age Is a Time of Transition
c. Middle Age Is a Time of Stress
d. Middle Age Is a Time of Evaluation

5. _____ continues to dry out and is prone to more wrinkling, particularly on the sensitive face area. Wrinkles, or creases in the skin, are a normal part of aging.

a. Hair
b. Skin
c. sarcopenia
d. Lungs

6. The loss of muscle mass and strength that occurs with aging is referred to as _____

a. Hair
b. Skin
c. sarcopenia
d. Lungs

7. The _____ serve two functions: Supply oxygen and remove carbon dioxide.

a. Hair
b. Skin
c. sarcopenia
d. Lungs

8. Genes also determine how much _____ remains on your head.

a. Hair
b. Skin
c. sarcopenia
d. Lungs

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9. It refers to a loss of elasticity in the lens of the eye that makes it harder for the eye to focus on objects that are closer to the person:

a. Hypertension
b. Vision
c. Diabetes
d. Digestive Issues

10. Heartburn, also called acid indigestion or pyrosis, is a common digestive problem in adults and is the result of stomach acid backing up into the esophagus:

a. Hypertension
b. Cancer
c. Diabetes
d. Digestive Issues

♦♦♦♦♦

UNIT III

MIDDLE AGE HAZARDS

STRUCTURE

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3.1 LEARNING OBJECTIVE

After learning this unit, students will be able to:

- Understand the Personal and Social Hazards.
- Understand the Conditions Influencing Vocational Satisfaction in Middle Adulthood.
- Understand the Marital Hazards & Relationships in Middle Adulthood.
- Understand the Singlehood & Physical Mobility in Middle Adulthood.
- Understand the Normal Physiological Changes in Middle Adulthood& The Climacteric.

3.2 PERSONAL AND SOCIAL HAZARDS

Personal Hazards of Middle Age

The major personal and social hazards of middle age stem from the tendency of many men and women to accept the cultural stereotype of the middle-aged person as fat, forty, and balding. Because of a lack of scientific information about middle age, cultural stereotypes and many traditional beliefs have persisted. They can have serious effects on the attitudes of middle-aged persons and members of the social group toward them. However, while serious to good personal and social adjustments is acceptance of cultural stereotypes and traditional beliefs, they are by no means the only hazards. Some of the important personal and social hazards that make adjustment especially difficult for middle-aged people in the American culture of today are discussed below. There are a number of personal hazards middle-aged people encounter in their adjustments to their new roles and new lifestyles. Of these, six are especially common and serious.

- **Acceptance of Traditional Beliefs**

  Acceptance of traditional beliefs about middle age has a profound influence on attitudes toward the physical changes that come with advancing age. The menopause, for example, is often referred to as a "critical" period, and this can heighten a women's dread of it. As Parker has said:

  This term carries the implication of danger – that woman is on the brink of disaster, that her health, her happiness, and her very life is in jeopardy. It further implies that this is not merely a time of crisis that can be met forthwith and dissolved, but rather years when she must feel her way along a narrow ledge of safety, at any moment of which by one false step she might fall into the abyss of a mental breakdown or serious physical illness.

  Because hair on the head, face, body, arms, and legs is traditionally associated with virility in men, the thinning of the hair in middle age is likely to be a source of great concern to them. Even the beginning of baldness disturbs them because they believe that it is indicative of a decline in their sexual powers. In reality, anxiety about virility is one of the chief causes of such decline, and the balding middle-aged man who worries about his sexual powers merely accelerates the rate of their decline.

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- **Idealization of Youth**

  Many middle-aged people, particularly men, are in constant rebellion against the restrictions age places on their usual patterns of behaviour. A man may refuse to adhere to a diet his doctor prescribes or to restrict his activities for the sake of his health. Like the pubescent child, the middle-aged man rebels against restrictions on behaviour, but for a different reason. Rebellion stems from a recognition of the value that society attaches to youth and thus he is rebelling against restrictions that mean he is growing old. This may bring on middle-aged ailments of minor or major seriousness. As Steincrohn has pointed out:

  If you relax more often, if you slow up, don't believe that you will grow old prematurely. The grim reaper won't swish his scythe at you and cut grim reaper won't swish his scythe at you and cut you off long before you reach the 70s and 80s. On the contrary, the reaper seems to have patience for the relaxers and is impatient with the overdoers.

  Women who make the poorest adjustments to middle age are those who have attached a great deal of importance to a youthful appearance and masculine admiration. When they are forced to recognize that they are no longer as attractive as they once were and that they cannot attract and hold masculine attention, they may openly rebel against middle age. When adjustment to middle age is poor, as shown by constant rebellion against the physical changes that inevitably come with aging, interest in clothing is intensified. Men and women concentrate mainly on selecting clothes which will make them look younger than they are. Bright colors, extreme styles, and a large wardrobe become as important to the middle-aged man or women who is trying to defy age as they are to the adolescent. Rebellion against middle age is often heightened by magazine articles, television advertisements, and so on, that stress what the middle-aged person can and should do to camouflage the telltale signs of aging. Ryan, however, has suggested that these changes in appearance are not necessarily unattractive.

  Some of these changes may make the individual more, rather than less, attractive. Often the first and most obvious change is in the color of the hair which usually turns to gray and then to white. This frequently is a positive factor: many people are more attractive with white hair. Also, as individuals grow older, the face becomes more lined and wrinkled. This, again, is not necessarily a detriment. These lines may give a pleasing character to a face which was bland and uninteresting with the smoothness of youth.

- **Role Changes**

  Changing roles is never easy, especially after one has played certain prescribed roles over a period of time and has learned to derive satisfaction from them. Furthermore, too much success in one role is likely to lead to rigidity and may make adjustment to another role difficult. Also, a person who has played a narrow range of roles is likely to be less flexible than one who has played a wider range and has learned to derive satisfaction from different roles. The person who has played many roles find it easier to shift to a new one. To make a good adjustment to new roles, the individual must, as Havighurst has explained, "withdraw emotional capital from one role and invest it in another one".

- **Changing Interests**

  A serious hazard to good personal adjustments in middle age comes from the necessity for changing interests as physical strength and endurance decrease

and as health deteriorates. Unless middle-aged men and women can develop new interests to replace those they must give up, or unless they have developed enough interests in their earlier years to be able to abandon some of them without feeling their loss too seriously, they are likely to become bored and wonder how they can spend their leisure time.

Like adolescents who become bored when they have too few interests and activities to fill their time, middle-aged people, both men and women, are likely to try to "stir up some excitement." Usually they do this by seeking out extramarital relationships. While these may be temporarily satisfying, they are likely to lead to feelings of guilt and shame, to anxiety about being "caught," and to serious problems with the spouse and other family members if they are discovered. This will be discussed in more detail in the following articles.

- **Status Symbols**
  Women's increased interest in status symbols, discussed earlier in this chapter, which is a common characteristic, can be a hazard to good personal and social adjustments if families cannot afford the status symbols they want. In such cases, there are three common reactions on the part of women who crave these symbols. First, they may complain and nag their husbands for not providing the money for these symbols; second, they may overspend and plunge the family into debt; or, third, they may go to work to earn the money themselves. All of these patterns of response to the craving for status symbols tend to lead to frictional relationships with spouses, especially the third pattern, which many men feel reflects unfavourably on their ability to provide for their families.

- **Unrealistic Aspirations**
  Middle-aged people who have unrealistic aspirations concerning their achievements – often carried over from adolescence – face a serious hazard to good personal adjustments when they realize that they have fallen short of their goals and that time is fast funning out. While this hazard is more likely to have a direct effect on men than on women, women are indirectly affected when their husbands fail to achieve the financial and vocational success they had expected. Even though women who work tend to have more realistic aspirations than men, they may also realize that they have not reached their goals and that time is running short. Failure to reach any goal can lead to feelings of inferiority and inadequacy, feelings that tend to become generalized and result in a failure complex. People who develop such complexes have a defeatist attitude toward everything they undertake. As a result, their achievements fall even further below their aspirations.

3.3 CONDITIONS INFLUENCING VOCATIONAL SATISFACTION IN MIDDLE ADULTHOOD

Good vocational adjustment in early adulthood will not necessarily guarantee the same in middle age because the conditions contributing to good adjustment at one age often differ from those at another. Some of the conditions that influence the vocational adjustments of middleaged men and women are,

- **Satisfaction with Work:** Middle-aged men and women who like their work will make far better vocational adjustments than those who have stayed on jobs they disliked because of earlier family responsibilities and who

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now feel "trapped." Opportunities for Promotion: Each year, as workers approach the age of compulsory retirement, their chances for promotion grow slighter and they are likely to be pushed aside to make way for younger workers. This has an adverse effect on vocational adjustments.

- **Vocational Expectations**: As retirement becomes imminent, middle-aged workers assess their achievements in light of earlier aspirations. This assessment, whether favorable or unfavorable, has a profound effect on vocational adjustments.
- **Increased Use of Automation:** Certain aspects of automation militate against good vocational adjustment on the part of middle-aged workers, such as boredom and lack of pride in their work, the possibility of losing their jobs to younger workers, increased speed required on the job, which makes many older workers nervous, and an unwillingness to retrain because of the imminence of retirement.
- **Attitude of Spouse:** If a wife is dissatisfied with her husband's status at work, his pay, or the fact that his work takes him away from home and she is lonely-now that the children are grown the husband too may become dissatisfied. Women whose husbands object to their working and constantly complain about their being out of the home may also experience job dissatisfaction.
- **Attitude toward "Big Business": Workers** who take pride in being associated with big, prestigious companies will make better adjustments to their work than those who regard themselves merely as little cogs in big machines.
- **Attitudes toward Co-workers:** Middle-aged workers who resent the treatment they receive from their superiors or their subordinates and who regard younger workers as shiftless and careless will have less favorable attitudes toward their work than those who are on friendlier terms with their co-workers.
- **Relocation:** How workers feel about moving to another community in order to keep their present jobs or be promoted to better ones will have a profound influence on their vocational adjustments.
- **Adjustment to changed family patterns:** The pattern of family life undergoes marked changes during the period of middle adulthood.
- **Adjustment to changed roles:** When the children leave the home either for education, to pursue a career or to marry parents must face lots of adjustments of what is commonly referred as the period of " empty nest". Role changes that necessitate by the empty nest period of family life affect women far more than men. It is a traumatic and unhappy period in life for the typical women.
- **Adjustment to Spouse:** With the ending of parental responsibilities, the husband and wife once again become dependent upon each other for companionship. Whether they will adjust successfully to this changed pattern of family relationships is greatly influenced by how well adjusted they were when parental

roles took precedence over husband-wife roles. Only when the husband and wife can establish a close relationship, similar to the one they had during the early years of marriage, they can find happiness in marriage during middle age.

- **Sexual Adjustments:** There is ample evidence that sex is as important to marital satisfaction in middle-age today as it is in early adulthood. There is a sharp rise in sexual satisfaction in the post parental years after low points during the years of school-aged and teen-aged children. As children begin to leave home-the "launching stage"-sexual satisfaction between the parents increases.
- **Adjustments to In-Laws:** There are two new kinds of in-law adjustments that must be made during middle age. These are, first, adjustments to children's spouses and, second, adjustments to the care of aging parents. Because many young people today are marrying while still in their late teens or early twenties, adjustment to a child's spouse on the part of the parents usually must be made while the parents are still in their forties or, at the latest, in their early fifties. Because middle-aged parents of today usually got married at about the same ages that their own children are marrying, caring for their own aged parents is also likely to occur in their forties or early fifties. If, however, adjustments to both older and younger in laws must be made simultaneously, it is doubly hard.
- **Adjustment to Grandparenthood:** With the present trend toward early marriage, many men and women today become grandparents before middle age ends. In fact, some men and women become grandparents before middle age begins. Grandparents as a group play less important roles in the lives of their children and grandchildren than they did in the past. Because today's grandparents have fewer contacts with their grandchildren, they have less influence over them than was true of past generations. As grandchildren approach the teens, their relationships with their grandparents tend to worsen, partly because they often have intolerant attitudes toward middle aged and elderly people and partly because grandparents frequently disapprove of the dress, grooming, and behavior of today's teenagers.
- **Adjustment to approaching old age:** It is a well-known psychological fact that people adjust more quickly and more easily to problems if they are prepared for them beforehand than if they must face and cope with them without any foreknowledge. While few counseling services, as in the case of preparation for retirement, have tried to prepare middle-aged people for approaching old age, there is much advice given in the mass media, and many doctors try to encourage their middle-aged patients to prepare, physically at least, for a healthy old age.

3.4 MARITAL HAZARDS

Although some of the marital hazards of middle age are similar to those of early adulthood, most stem from changes in the pattern of family life that occur at this time and thus are unique to middle age. Furthermore, marital hazards are often more serious now than they were in early adulthood because the chances of establishing good adjustments grow slimmer as time passes and as the children leave home, lowering the adult's motivation to provide a happy family atmosphere. While marital hazards have a greater direct impact on

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middle-aged women than on middle-aged men, since the woman's life has been centred around her home and family for many years, they have an important indirect effect on the man's vocational life. As has been pointed out before, not only do the attitudes of different family members, especially those of the wife, influence the man's attitude toward his work and thus his vocational adjustments, but his adjustment to his family life also affects the quality of his work and his dedication to it. A man whose family life is stressful and unhappy, for example, finds it difficult to give his wholehearted attention to his work and may become a vocational underachiever. Also, because competing with other workers requires more concentrated effort in middle age.

3.5 RELATIONSHIPS IN MIDDLE ADULTHOOD

By middle age, more than 90 percent of adults have married at least once. Married people often describe their marital satisfaction in terms of a "U-curve." People generally affirm that their marriages are happiest during the early years, but not as happy during the middle years. Marital satisfaction then increases in the later years after finances have stabilized and parenting responsibilities have ended. Couples who stay together until after the last child leaves home will probably remain married for at least another 20 years as long as their intent was not to wait until the last child leaves the home to divorce.

Divorce

Middle adults do not exhibit an immunity to problems in relationships. About 50 percent of all marriages in the United States end in divorce, with the median duration of these marriages being about 7 years. And of those that do last, marital bliss is not always a prominent feature. Why do so many marriages dissolve, and can spouses do anything to ensure that things work out? Relationships dissolve for as many reasons as there are numbers of relationships. In some cases, the couple cannot handle an extended crisis. In other cases, the spouses change and grow in different directions. In still others, the spouses are completely incompatible from the very start. Long-term relationships rarely end because of difficulties with just one of the partners. Conflicts, problems, growing out of love, and "empty nest" (feeling a lack of purpose in life or emotional stress in response to all the children leaving home) issues inevitably involve both parties.

The course of love changes over time, and these changes may become evident by middle adulthood. The ideal form of love in adulthood involves the three components of passion, intimacy, and commitment—called consummate love, or complete love. This type of love is unselfish, devoted, and most often associated with romantic relationships. Unfortunately, achieving consummate love, as Sternberg noted, is similar to losing weight. Getting started is easy; sticking to it is much harder. For many middle-age couples, passion fades as intimacy and commitment build. In other words, many middle adults find themselves in a marriage typified by companionate love, which is both committed and intimate but not passionate. Yet love need not be this way, nor do such changes necessitate the end of a long-term relationship. In contrast, many middle adult couples find effective ways of improving their ability to communicate, increasing emotional intimacy, rekindling the fires of passion, and growing together. The understanding that evolves between two people over time can be wonderful.

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For others, the end of passion signals the end of the relationship. Passion enamors some people to such a degree that they do not approach their loving relationships realistically. This observation especially holds true for those who base their relationships on infatuation or the assumption that "true love" takes care of all conflicts and problems. When the flames of passion die out (which is inevitable in many cases) or the going gets rough, these spouses decide to move on to a new relationship. Divorce and extramarital relationships are but two consequences of marital unhappiness and dissatisfaction. Interpersonal disagreements may increase as the couple becomes better acquainted and intimate. People who never learned how to communicate their concerns and needs effectively with their spouse or how to work through conflicts are more likely to become separated or divorced. Most couples quarrel and argue, but few know how to work at resolving conflicts equitably.

Relationships that last

What characteristics predict if a loving relationship will thrive or die? Long-term relationships share several factors, including both partners regarding the relationship as a long-term commitment; both verbally and physically expressing appreciation, admiration, and love; both offering emotional support; and both considering each other as a best friend.

Essential to preserving a quality relationship is the couple's deciding to practice effective communication. Communication establishes and nurtures intimacy within a relationship, helping partners to better relate to and understand each other. Intimacy helps them feel close, connected, and loved, and creates an atmosphere of mutual cooperation for active decision-making and problem solving. Communicating realistically leads to a satisfying and healthy relationship, regardless of the relationship's level of development.

Friends

In all age groups, friends provide a healthy alternative to family and acquaintances. They offer support, direction, guidance, and a change of pace from usual routines. Although many young adults manage to maintain at least some friendships, family, school, and work can become greater concerns for middle adults. Life responsibilities reach an all-time high, so time for socializing is often at an exceptional premium. For this reason, middle adults generally maintain fewer close friendships than their newlywed and retired counterparts, although this is not always the case. Yet where quantity is lacking, quality predominates. People often nourish some of the closest ties between friends during middle adulthood.

Children

As adults wait later to marry and start families, more and more middle adults find themselves raising small children. This is not the typical pattern, however. By the time most parents reach middle age, their children are at least of adolescent age. Ironically, middle adults and their adolescent children often both experience emotional crises. For adolescents the crisis involves the search for their own identities as separate from their family members; for middle adults, the search is for generativity, or fulfillment through such activities as raising children, working, or creating. These two crises are not

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always compatible, as parents try to deal with their own issues as well as those of their adolescents (for example, discovering identity).

Some middle adults begin to "live out" their own youthful fantasies through their children. They may try to make their teenage children into improved versions of themselves. Witnessing their children on the verge of becoming adults can trigger a midlife crisis. The adolescent journey into young adulthood reminds middle-age parents of their own aging processes and the inescapable settling into middle and later adulthood. As a result, parents may experience depression or seek to recapture their youth through age-inappropriate behavior and sexual adventures. Some teenagers ignite so much tension at home that their departure to college or into a career act as a relief to parents. Other parents experience the empty nest syndrome after all of their children leave home. Without the children as a focal point for their lives, they have trouble reconnecting to each other and rediscovering their own individuality separate from parenthood.

In recent decades, Americans have witnessed the phenomenon of grown children staying or returning home to live with their parents. Whether they choose to stay at home for financial or emotional reasons, adult children who live with their parents can cause difficulty for all parties. Parents may delay their own "getting reacquainted" stage while managing a "not-so-empty nest," and their adult children may have to adjust to social isolation and problems establishing intimacy with significant others of their own age. Adult children living at home may also shirk necessary adult responsibilities. This "adult-child-living-with-the-parents" arrangement tends to work best when both parties agree upon it as a temporary situation, and when the child is less than 25. Middle-age parents typically maintain close relationships with their grown children who have left home. However, many parents report feeling as if they continue to give more than they receive from their relationships with their children. This can be all the more the case for "sandwich" generation middle-agers who must also tend to the needs of their own aging parents.

Parents

Most middle adults characterize the relationship with their parents as affectionate. Indeed, a strong bond often exists between related middle and older adults. Although the majority of middle adults do not live with their parents, they usually maintain frequent and positive contact. And, perhaps for the first time, middle adults see their parents as fallible human beings. One issue facing middle adults is that of caring for their aging parents. In some cases, adults, who expected to spend their middle-age years traveling and enjoying their own children and grandchildren, instead find themselves taking care of their ailing parents. Relationships with older adult parents vary a great deal. Some parents remain completely independent of their adult children's support; others partially depend upon their children; and still others completely depend upon them. Daughters and daughters-in-law most commonly take care of aging parents and in-laws. Support groups and counseling exist for adults caring for their older parents. These typically provide information, teach caregiver skills, and offer emotional support. Other programs, such as Social Security and Medicare, ease the financial burdens of older adults and their caregivers.

Middle adults normally react with intensity and pain to the death of one or both parents. (Of course, this holds true for individuals at all stages of the lifespan.) The death of one's parents ends a life-long relationship and offers a "wake-up call" to live life to its fullest and mend broken relationships while the people involved still live. Finally, the death serves as a reminder of one's own mortality. Even though the death of a parent is never welcome, some long-term adult caretakers express certain ambivalent feelings about the event.

3.6 SINGLEHOOD

According to a recent Pew Research study, 16 per 1,000 adults age 45 to 54 have never-married, and 7 per 1,000 adults age 55 and older have never married in the U. S. (Wang & Parker, 2014). However, some of them may be living with a partner. In addition, some singles at midlife may be single through divorce or widowhood. Bella DePaulo (2014) has challenged the idea that singles, especially the always single, fair worse emotionally and in health when compared to those who are married. DePaulo suggests that there is a bias in how studies examine the benefits of marriage. Most studies focus on only a comparison between married versus not married, which does not include a separate comparison between those who have always been single, and those who are single because of divorce or widowhood. Her research, along with that of others, has found that those who are married may be more satisfied with life than the divorced or widowed, but there is little difference between married and always single, especially when comparing those who are recently married with those who have been married for four or more years. It appears that once the initial blush of the honeymoon wears off, those who are wedded are no happier or healthier than those who remained single. This might also suggest that there may be problems with how the "married" category is also seen as one homogeneous group.

3.7 PHYSICAL MOBILITY IN MIDDLE ADULTHOOD

The importance of not succumbing to the temptations of a sedentary lifestyle was as obvious to Hippocrates in 400 BCE as it is now. Piasecki et al. (2018) are of the opinion that sarcopenia (loss of muscle tissue and function as we age) in legs might be the result of leg muscles becoming detached from the nervous system. Further, Piasescki et al. (2018) believe that exercise encourages new nerve growth slowing the progression of sarcopenia. Persons aged 75 may have up to 30-60% fewer nerve endings in their leg muscles than they did in their early 20s.

Sarcopenia has only recently been recognized as an independent disease entity since 2016 (ICD-10). In 2018 the U.S. Center for Disease Control and prevention assigned sarcopenia its own discrete medical code. Disease entities that affect mobility will become an increasingly costly phenomenon and will affect the quality of life of millions of people as the population ages. In many ways, it is a natural phenomenon, and many doctors and researchers have been reticent to overly pathologize natural changes associated with age. However, mobility is now becoming a central concern, and some researchers are now identifying some conditions like osteosarcopenia, which describes the decline of both muscle tissue (sarcopenia) and bone tissue (osteoporosis). Diagnoses and pharmaceuticals which deal with the central question of mobility will become ever more

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important, even more so as the burgeoning costs associated with caring for those with mobility issues become apparent.

The years between 30 and 60 can see the onset of rheumatoid arthritis (RA). This is the third most common form of arthritis and its specific etiology is unknown at this time. RA occurs when antibodies attack normal synovial fluid in the joints mistaking them for an alien threat. It affects women more than men by a factor of around 3 to 1. Peak onset for women is reckoned to be sometime in the early 40s. This has led to the conclusion, albeit a preliminary one, that RA is caused by hormonal changes. Women who are pregnant, and have RA, often experience a temporary remission, again leading to the identification of hormonal changes in the body as the most likely culprit. Women also experience symptoms at an earlier age. This condition is often associated with people in their 60s, but only about a third first experience symptoms at this age, though they become more acute with the passage of time.

Human beings reach peak bone mass around 35-40. Osteoporosis is a "silent disease" which progresses until a fracture occurs. The sheer scale and cost of this illness is radically underestimated. It is often associated with women due to the fact that bone mass can deteriorate in women much more quickly in middle age due to menopause. After menopause women can lose 5-10% bone mass per year, rendering it advisable to monitor intakes of calcium and Vitamin D, and evaluate individual risk factors. Beginning in their 60s, though, men and women lose bone mass at roughly the same rate. The number of American men diagnosed with osteoporosis is currently around the 2 million mark, with a further 12 million reckoned to be at risk. The National Osteoporosis Foundation (NOF) estimates that 50% of women and 25% of men over the age of 50 will suffer a bone fracture due to osteoporosis. Attention at this stage of life may bring pronounced health benefits now and later for both women and men. Fixing the damage takes a considerable amount of the Medicare budget.

The health benefits that walking and other physical activity have on the nervous system are becoming increasingly obvious to those who study aging. Adami et al (2018) found pronounced links between weight-bearing exercise and neuron production. We tend to think of the brain as a central processing unit giving instructions to the body via the conduit of the central nervous system, but contemporary science is now coalescing around the idea that muscles and nerves also communicate with the brain—it is a two-way informational and sustaining process. Many studies suggest that voluntary physical activity (VPA) extends and improves the quality of life. Such studies show that even moderate physical activity can bring large gains.

In addition, there is often an increase in chronic inflammation at this time of life with no discernible discrete cause (as opposed to acute inflammation associated with something like an infection). Inflammation is the body's natural way of responding to injury or harmful pathogens in the body. The function of inflammation is to eliminate the initial cause of injury and initiate tissue repair, but when this happens consistently and for longer periods of time, the body's stress response systems become overworked. This can have serious effects on health, such as fatigue, fever, chest or abdominal pain, rashes,

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or greater susceptibility to diseases such as cancer, rheumatoid arthritis, and heart disease. Untreated acute inflammation, autoimmune disorders, or long-term exposure to irritants are some contributing factors, as is social isolation (Nersessian et al, 2018). Chronic inflammation has been implicated as part of the cause of the muscle loss that occurs with aging. Chronic inflammatory disorder is now implicated in a whole series of chronic diseases such as dementia, and the biomedical evidence for its centrality is now emerging in the medical research literature. Because of the aging population, health issues associated with autoimmune disease, chronic inflammation, and bone mass density will become central concerns in health and social policy in the coming decades.

3.8 NORMAL PHYSIOLOGICAL CHANGES IN MIDDLE ADULTHOOD

There are a few primary biological physical changes in midlife. There are changes in vision, hearing, more joint pain, and weight gain (Lachman, 2004). Vision is affected by age. As we age, the lens of the eye gets larger but the eye loses some of the flexibility required to adjust to visual stimuli. This is known as presbyopia. Middle-aged adults often have trouble seeing up close as a result. Night vision is also affected as the pupil loses some of its ability to open and close to accommodate drastic changes in light.

Presbycusis is the most common cause of hearing loss, afflicting one out of four persons between ages 65 and 74, and one out of two by age 75. This loss accumulates after years of being exposed to intense noise levels and is generally due to the loss or damage of nerve hair cells inside the cochlea. It is more common in men, but men are also more likely to work in noisy occupations, which may explain their nearly doubled rates of hearing loss levels. Hearing loss is also exacerbated by cigarette smoking, high blood pressure, and stroke. High-frequency sounds are the first affected by such hearing loss. Hearing loss could be prevented by guarding against being exposed to extremely noisy environments.

There is new concern over hearing loss as early as childhood with the widespread use of headphones, as loud and/or prolonged listening can cause damage to the cilia, or the tiny sensory hairs, within the cochlea. Another cause of hearing loss in middle age is otosclerosis, a physiological condition affecting the middle ear and its bone structure. This occurs when one of the bones in the middle ear, the stapes, acquires a rigidity via abnormal bone growth which it should not have. Unable to vibrate, it induces hearing impairment. Otosclerosis is often described as a rare condition, but it afflicts a good number of Americans, with white women being more prone, though there has been some speculation that this was the origin of deafness in the composer Beethoven. Its cause is unknown, but chronic inflammation may be a risk factor. We tend to associate hearing loss with older adults, but the peak onset is in the middle adulthood age bracket. Weight gain sometimes referred to as the middle-aged spread, or the accumulation of fat in the abdomen is one of the common complaints of midlife adults. Men tend to gain fat on their upper abdomen and back while women tend to gain more fat on their waist and upper arms. Many adults are surprised at this weight gain because their diets have not changed. However, the metabolism slows by about one-third during midlife (Berger, 2005). Consequently, midlife adults have to increase their level of exercise, eat less, and watch their nutrition to maintain their earlier physique.

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Many of the changes that occur in midlife can be easily compensated for (by buying glasses, exercising, and watching what one eats, for example.) Most midlife adults experience generally good health. However, the percentage of adults who have a disability increases through midlife; while 7 percent of people in their early 40s have a disability, the rate jumps to 30 percent by the early 60s. This increase is highest among those of lower socioeconomic status (Bumpass & Aquilino, 1995). What can we conclude from this information? Again, lifestyle has a strong impact on the health status of midlife adults. Smoking tobacco, drinking alcohol, poor diet, stress, physical inactivity, and chronic diseases such as diabetes or arthritis reduce overall health. It becomes important for midlife adults to take preventative measures to enhance physical well-being. Those midlife adults who have a strong sense of mastery and control over their lives, who engage in challenging physical and mental activity, who engage in weight-bearing exercise, monitor their nutrition, and make use of social resources are most likely to enjoy a plateau of good health through these years. Not only that, but those who begin an exercise regimen in their 40s may enjoy comparable benefits to those who began in their 20s according to Saint-Maurice et al. (2019), who also found that while it is never too late to begin, continuing to do as much as possible, is just as important.

3.9 THE CLIMACTERIC

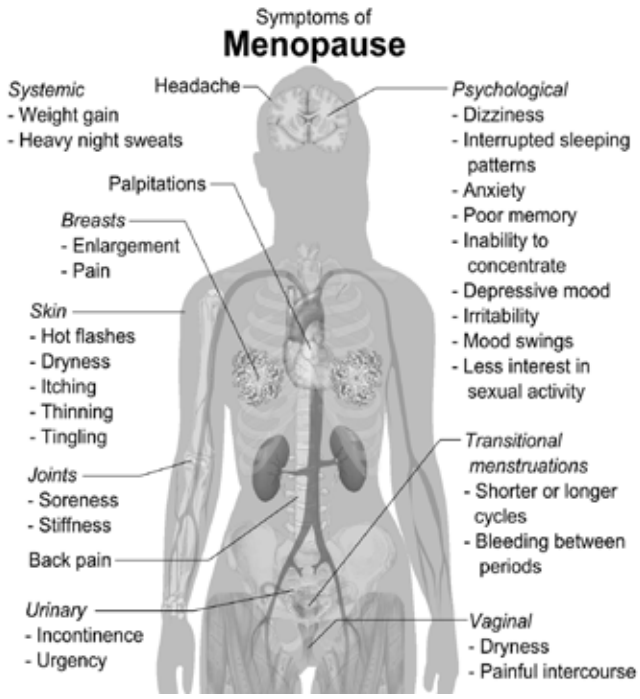
One biologically based change that occurs during midlife is the climacteric. During midlife, men may experience a reduction in their ability to reproduce. Women, however, lose their ability to reproduce once they reach menopause.

Menopause

Symptoms of menopause shown on diagram of woman, indicating things like headaches, weight gain, night sneezes, breast pain or enlargement, hot flashes, sore joines, psychological issues, transitional menstruation, etc.

Figure Most women experience some of these common symptoms of menopause, but the severity and experience of these symptoms is also influenced by cultural expectations.

Menopause refers to a period of transition in which a woman's ovaries stop releasing eggs and the level of estrogen and progesterone production decreases. After menopause, a woman's



menstruation ceases (U. S. National Library of Medicine and National Institute of Health [NLM/NIH], 2007).

Changes typically occur between the mid-40s and mid-50s. The median age range for a woman to have her last menstrual period is 50-52, but ages vary. A woman may first begin to notice that her periods are more or less frequent than before. These changes in menstruation may last from 1 to 3 years. After a year without menstruation, a woman is considered menopausal and no longer capable of reproduction. (Keep in mind that some women, however, may experience another period even after going for a year without one.) The loss of estrogen also affects vaginal lubrication which diminishes and becomes waterier. The vaginal wall also becomes thinner, and less elastic.

Menopause is not seen as universally distressing (Lachman, 2004). Changes in hormone levels are associated with hot flashes and sweats in some women, but women vary in the extent to which these are experienced. Depression, irritability, and weight gain are not necessarily due to menopause (Avis, 1999; Rossi, 2004). Depression and mood swings are more common during menopause in women who have prior histories of these conditions rather than those who have not. The incidence of depression and mood swings is not greater among menopausal women than non-menopausal women.

Cultural influences seem to also play a role in the way menopause is experienced. For example, once after listing the symptoms of menopause in a psychology course, a woman from Kenya responded, "We do not have this in my country or if we do, it is not a big deal," to which some U.S. students replied, "I want to go there!" Indeed, there are cultural variations in the experience of menopausal symptoms. Hot flashes are experienced by 75 percent of women in Western cultures, but by less than 20 percent of women in Japan (Obermeyer in Berk, 2007).

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Women in the United States respond differently to menopause depending upon the expectations they have for themselves and their lives. White, career-oriented women, African-American, and Mexican-American women overall tend to think of menopause as a liberating experience. Nevertheless, there has been a popular tendency to erroneously attribute frustrations and irritations expressed by women of menopausal age to menopause and thereby not take her concerns seriously. Fortunately, many practitioners in the United States today are normalizing rather than pathologizing menopause.

Concerns about the effects of hormone replacement have changed the frequency with which estrogen replacement and hormone replacement therapies have been prescribed for menopausal women. Estrogen replacement therapy was once commonly used to treat menopausal symptoms. But more recently, hormone replacement therapy has been associated with breast cancer, stroke, and the development of blood clots (NLM/ NIH, 2007). Most women do not have symptoms severe enough to warrant estrogen or hormone replacement therapy (HRT). Women who do require HRT can be treated with lower doses of estrogen and monitored with more frequent breast and pelvic exams. There are also some other ways to reduce symptoms. These include avoiding caffeine and alcohol, eating soy, remaining sexually active, practicing relaxation techniques, and using water-based lubricants during intercourse.

Fifty million women in the USA aged 50-55 are post-menopausal. During and after menopause a majority of women will experience weight gain. Changes in estrogen levels lead to a redistribution of body fat from hips and back to stomachs. This is more dangerous to general health and wellbeing because abdominal fat is largely visceral, meaning it is contained within the abdominal cavity and may not look like typical weight gain. That is, it accumulates in the space between the liver, intestines, and other vital organs. This is far more harmful to health than subcutaneous fat which is the kind of fat located under the skin. It is possible to be relatively thin and retain a high level of visceral fat, yet this type of fat is deemed especially harmful by medical research.

Andropause

Do males experience a climacteric? Yes. While they do not lose their ability to reproduce as they age, they do tend to produce lower levels of testosterone and fewer sperm. However, men are capable of reproduction throughout life after puberty. It is natural for sex drive to diminish slightly as men age, but a lack of sex drive may be a result of extremely low levels of testosterone. About 5 million men experience low levels of testosterone that results in symptoms such as a loss of interest in sex, loss of body hair, difficulty achieving or maintaining an erection, loss of muscle mass, and breast enlargement. This decrease in libido and lower testosterone (androgen) levels is known as andropause, although this term is somewhat controversial as this experience is not clearly delineated, as menopause is for women. Low testosterone levels may be due to glandular diseases such as testicular cancer. Testosterone levels can be tested and if they are low, men can be treated with testosterone replacement therapy. This can increase sex drive, muscle mass, and beard growth. However, long term HRT for men can increase the risk of prostate cancer (The Patient Education Institute, 2005).

The debate around declining testosterone levels in men may hide a fundamental fact. The issue is not about individual males experiencing individual hormonal change at all. We have all seen the adverts on the media promoting substances to boost testosterone: "Is it low-T?" The answer is probably in the affirmative, if somewhat relative. That is, in all likelihood, they will have lower testosterone levels than their fathers. However, it is equally likely that the issue does not lie solely in their individual physiological makeup, but is rather a generational transformation (Travison et al, 2007). Why this has occurred in such a dramatic fashion is still unknown. There is evidence that low testosterone may have negative health effects on men. In addition, there are studies that show evidence of rapidly decreasing sperm count and grip strength. Exactly why these changes are happening is unknown and will likely involve more than one cause.

3.10 CHAPTER SUMMARY

The major personal and social hazards of middle age stem from the tendency of many men and women to accept the cultural stereotype of the middle-aged person as fat, forty, and balding. Because of a lack of scientific information about middle age, cultural stereotypes and many traditional beliefs have persisted. They can have serious effects on the attitudes of middle-aged persons and members of the social group toward them. However, while serious to good personal and social adjustments is acceptance of cultural stereotypes and traditional beliefs, they are by no means the only hazards. Good vocational adjustment in early adulthood will not necessarily guarantee the same in middle age because the conditions contributing to good adjustment at one age often differ from those at another. Although some of the marital hazards of middle age are similar to those of early adulthood, most stem from changes in the pattern of family life that occur at this time and thus are unique to middle age. Furthermore, marital hazards are often more serious now than they were in early adulthood because the chances of establishing good adjustments grow slimmer as time passes and as the children leave home, lowering the adult's motivation to provide a happy family atmosphere. By middle age, more than 90 percent of adults have married at least once. Married people often describe their marital satisfaction in terms of a "U-curve." People generally affirm that their marriages are happiest during the early years, but not as happy during the middle years. Marital satisfaction then increases in the later years after finances have stabilized and parenting responsibilities have ended. Couples who stay together until after the last child leaves home will probably remain married for at least another 20 years as long as their intent was not to wait until the last child leaves the home to divorce. There are a few primary biological physical changes in midlife. There are changes in vision, hearing, more joint pain, and weight gain (Lachman, 2004). Vision is affected by age. As we age, the lens of the eye gets larger but the eye loses some of the flexibility required to adjust to visual stimuli. This is known as presbyopia. Middle-aged adults often have trouble seeing up close as a result. Night vision is also affected as the pupil loses some of its ability to open and close to accommodate drastic changes in light. One biologically based change that occurs during midlife is the climacteric. During midlife, men may experience a reduction in their ability to reproduce. Women, however, lose their ability to reproduce once they reach menopause.

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3.11 REVIEW QUESTIONS

SHORT ANSWER TYPE QUESTION

1. **Explain Unrealistic Aspirations.**
2. **Explain Adjustment to Spouse.**
3. **Explain Children in middle age.**
4. **Explain Menopause.**
5. **Explain Andropause.**

LONG ANSWER TYPE QUESTION

1. **Explain personal hazards.**
2. **Explain conditions influencing vocational satisfaction in middle adulthood.**
3. **Explain relationships in middle adulthood.**
4. **Explain singlehood.**
5. **Explain physical mobility in middle adulthood**

3.12 MULTIPLE CHOICE QUESTIONS

1. **According to the text, middle adulthood lasts until approximately:**
   a. Age 65
   b. Age 35
   c. Age 45
   d. Age 55
2. **During early adulthood, which of the following are thought to be at their peak?**
   a. Hearing high-pitched noises
   b. Metabolism
   c. Reaction times
   d. Flexibility
3. **What are some of the 'crises' affecting social and emotional well-being in middle adulthood?**
   a. Physical signs of ageing
   b. Children growing up and leaving home
   c. Boredom with a chosen career
   d. All of these
4. **Holds information for 15 to 25 seconds. Again, there is __ decline in middle age.**
   a. Sensory Memory; no
   b. Short-Term Memory; no
   c. Long-Term Memory; no
5. **When compared with someone in their 20s, a person in their 40s is likely to have:**
   a. Worse Vision but Better Hearing

b. Worse Hearing but Better Vision
c. Worse Vision and Worse Hearing
d. Better vision and better hearing

6. During early adulthood, which of the following begin to decline?

a. Metabolism
b. Dexterity
c. Physical Fitness
d. Cognitive Functioning

7. Symptoms of _____ shown on diagram of woman, indicating things like headaches, weight gain, night sneezes, breast pain or enlargement, hot flashes, sore joins, psychological issues, transitional menstruation, etc.

a. Andropause
b. Menopause
c. Both of the above
d. None of the above

8. _____ is the most common cause of hearing loss.

a. Otosclerosis
b. Arthritis
c. Presbycusis
d. None of the above

9. The concept of 'grand-generativity' refers to:

a. The creation of large and significant projects that contribute to wider society
b. People developing their abilities and transmitting knowledge and values to younger generations in later life
c. Having grandchildren
d. Younger generations teaching those in older generations to understand new concepts relating to changes in the modern world

10. What does the term 'population ageing' mean?

a. The trend for the youngest age groups in society to grow faster than the oldest age groups
b. The trend for the middle-aged groups in society to grow faster than the oldest age groups
c. The trend for the youngest age groups in society to grow faster than the middle-aged groups
d. The trend for the oldest age groups in society to grow faster than the younger age groups

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UNIT IV

OLD AGE

STRUCTURE

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4.1 LEARNING OBJECTIVE

After learning this unit students will be able to:

- Understand the old age & Characteristics of Old Age.
- Understand the Development in Late Adulthood.
- Explain the Sensory Changes in Old Age.
- Describe the Intelligence and Memory & Health in Old Age.
- Understand the Physical Development & Psychological Hazards.

4.2 INTRODUCTION TO OLD AGE

Old age is the closing period in the life span. Age sixty is usually considered the dividing line between middle and old age. Chronological age is a poor criterion to use in marking off the beginning of old age because there are such marked differences among individuals in the age and better aging begins. Because of better living conditions and health care, most men and women today do not show the mental and physical signs of aging until the early seventies. The characteristics of old age are far more likely to lead to poor adjustment than to good and unhappiness rather than happiness. That is why old age is even more dreaded than middle age.

Old age consists of ages nearing the average life span of human beings, and thus the end of the human life cycle. Euphemisms and terms for older people include advanced adult, elderly, and senior (chiefly US) or senior citizen and pensioner. Older people have limited regenerative abilities and are more prone to disease, syndromes, and sickness than other adults. For the biology of aging see senescence.

4.3 CHARACTERISTICS OF OLD AGE

1. Old age is a period of decline - decline comes partly from physical and partly psychological factors. There is a change in body cells due to the aging process. An unfavorable attitude towards oneself and life, in general, can lead to a decline or become depressed and disorganized. Motivation plays a very important role in the decline.
2. There are individual differences in the effects of aging. People age differently because they have a different hereditary endowments, different socioeconomic and educational backgrounds, and different patterns of living. The general rule is physical aging precedes mental aging.
3. Old age is judged by different criteria - age is judged in terms of physical appearance and activities. One who has white hair is labeled as old. Many try to cover up their aging symptoms to create the illusion that they are not yet old.
4. There are many stereotypes of old people - let it be the folklore, the media, poetry, fiction, jokes, or different forms of humor or scientific studies, all portray the aged as those who are worn out physically and mentally, unproductive, accident-prone, hard to live, days of usefulness are over, should be pushed aside to make way for younger people.

Poor adjustment is characteristic of old age - Because of the unfavorable social attitudes towards the elderly that are reflected in the way the social group treats them, it is not

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surprising that many elderly people develop unfavorable self-concepts. These tend to be expressed in maladjusted behavior of different degrees of severity.

The period of old age begins at the age of sixty. At this age most individuals retire from their jobs formally. They begin to develop some concern and occasional anxiety over their physical and psychological health. In our society, the elderly is typically perceived as not so active, deteriorating intellectually, becoming narrowminded and attaching new significance to religion and so on. Many of the old people lose their spouses and because of which they may suffer from emotional insecurity.

'Nobody has ever died of old age', is a true statement. Since old age is close to the end point of life, death has been associated with old age. Death is actually caused by disease, pollution, stress, and other factors acting on the body. In the biological sense, some organs and systems of the body may start deteriorating. In the psychological sense, there may be measurable changes in the cognitive and perceptual abilities. There are also changes in the way a person feels about him/ herself. You must have come across old people who are very active in life and socially very participative. Such persons seem to be productive, stable and happy.

Mental or physical decline does not necessarily have to occur. Persons can remain vigorous, active, and dignified until their eighties or even nineties. In fact, the older persons have vast reservoir of knowledge, experience, and wisdom on which the community can draw. In view of increase in life expectancy increasingly greater proportion of society is joining the group of aged people. Hence, they need greater participation in national planning and make them feel as an integral part of society.

Old age has often been characterised as a period of loss and decline. However, development in any period of life consists of both gains and losses, although the gain-loss ratio becomes increasingly negative with advancing age (Heckhausen, Dixon, and Baltes, 1989; Baltes, 1987). The fact that man learns his way through life is made radically clear by consideration of the learning tasks of older people. They still have new experiences ahead of them, and new situations to meet. At age sixty-five when a man often retires from his occupation, his changes are better than even of living another ten years. During this time the man or his wife very likely will experience several of the following (i) decreased income, (ii) moving to a smaller house, (iii) loss of spouse by death, (iv) a crippling illness or accident, (v) a turn in the business cycle with a (vi) consequent change of the cost of living. After any of these events the situation may be so changed that the old person has to learn new ways of living.

The developmental tasks of later maturity differ in only one fundamental respect from those of other ages. They involve more of a defensive strategy that is of holding on the life rather than of seizing more of it. In the physical, mental and economic spheres the limitations become especially evident. The older person must work hard to hold onto what he already has. In the social sphere there is a fair chance of offsetting the narrowing of certain social contacts and interests by the broadening of others. In the spiritual sphere there is perhaps no necessary shrinking of the boundaries, and perhaps there is even a widening of them. Havighurst forward the following developmental tasks for this view.

- Adjusting to decreasing physical strength and health: Physical strength begins to decline from age 30 to age 80 and above. Most weakening occurs in the back and leg muscles, less in the arm muscles. There is a progressive decline in energy production. Bones become increasingly brittle and tend to break easily. Calcium deposits and disease of the joints increase with age. Muscle tissue decreases in size and strength. Muscle tone becomes increasingly difficult to maintain with age because of an increase in fatty substance within the muscle fibres. This is often caused by the relative inactive role thrust on the elderly in our society. Exercise can help maintain power and sometimes even restore strength to the unused muscles. Changes in the general posture become more evident in old age. It has been found that the organ systems of most persons show a 0.8 to 1 percent decline per year in functional ability after the age of 30. Some of this decline is normal, some is disease related and some are caused by factors such as stress, occupational status, nutritional status and various environmental factors.
- Adjusting to retirement and reduced income: Retirement requires adjustment to a new life-style characterised by decreased income, lesser activity level, and increased free time. Retirement causes extreme stress in males because in our society a significant part of men's identity depends on their jobs. Loss of job thus results in loss of self-esteem and self-worth. Retired people find it difficult to adjust to retirement because of financial problems, illness, and feelings of loneliness, and suddenly finding that time hangs and they do not know how to spend their time. Retired individuals have to make several adjustments in their roles, personal and social associations, and in their sense of accomplishment and productivity. However, it does not necessarily mean that retirement results in negative consequences for every person. Individual's personal attitude toward retirement varies as a function of a number of factors such as income, educational level, and occupational level. In case of some, it may not have any adverse effects on their self-esteem and life satisfaction. Health may even improve for some after retirement. Retired individuals may find more time for social and hobby-related activities especially if they have adequate economic resources and are healthy to engage in these activities.
- Adjusting to death of spouse: Elderly persons are not afraid of death. They do, however, fear to a great extent the dying process — the process of dying in pain or dying alone. Their feelings related to death may be due to specific occurrences in their lives such as being moved from home to nursing home, failing health, or the loss of one's spouse. Thus fear about death must be understood in the light of current life circumstances, the individual's own value system, and what death personally means to a person. Some older adults have to adjust to the death of their spouses. This task arises more frequently for women than for men. After they have lived with a spouse for many decades, widowhood may force older people to adjust to loneliness, moving to a smaller place, and learning about business matters etc.

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- Establishing an explicit affiliation with one's age group: Social convoy is a cluster of family members and friends who provide safety and support. Some bonds become closer with age, others more distant, a few are gained, and some drift away. Elders do try to maintain social networks of family and friends to preserve security and life continuity.
- Meeting social and civic obligations: Other potential gains in old age relate to the task of meeting social and civic obligations. For example, older people might accumulate knowledge about life (Baltes and Staudings, 2000) and thus may contribute to the development of younger people and the society.
- Establishing satisfactory physical living arrangements: The principal values that older people look for in housing are: (i) quiet, (ii) privacy, (iii) independence of action, (iv) nearness to relatives and friends, (v) residence among own cultural group, (vi) cheapness, (vii) closeness to transportation lines and communal institutions —libraries, shops, movies, churches, etc

4.4 DEVELOPMENT IN LATE ADULTHOOD

Late adulthood (old age) is generally considered to begin at about age 65. Erik Erikson suggests that at this time it is important to find meaning and satisfaction in life rather than to become bitter and disillusioned, that is, to resolve the conflict of integrity vs. despair. It has been estimated that by the year 2030, Americans over 65 will make up 20% of the population. Despite the problems associated with longevity, studies of people in their 70s have shown that growing old is not necessarily synonymous with substantial mental or physical deterioration. Many older people are happy and engaged in a variety of activities. Gerontology, an interdisciplinary field that studies the process of aging and the aging population, involves psychology, biology, sociology, and other fields.

Theories of successful aging. Theories of successful aging include the following:
The disengagement theory states that as people age, their withdrawal from society is normal and desirable as it relieves them of responsibilities and roles that have become difficult. This process also opens up opportunities for younger people; society benefits as more-energetic young people fill the vacated positions.

The activity theory contends that activity is necessary to maintain a "life of quality," that is, that one must "use it or lose it" no matter what one's age and that people who remain active in all respects—physically, mentally, and socially—adjust better to the aging process. Proponents of this theory believe that activities of earlier years should be maintained as long as possible.

1. **Ageism.** Ageism may be defined as the prejudice or discrimination that occurs on the basis of age. Although it can be used against people of all ages, older people are most frequently its target and it may often result in forced retirement. Stereotyping of the elderly is also an aspect of ageism, as seen in such a statement as "He drives like a little old lady."
2. **Physical changes.** People typically reach the peak of their physical strength and endurance during their twenties and then gradually decline. In later adulthood, a variety of physiological changes may occur, including some degree of atrophy

of the brain and a decrease in the rate of neural processes. The respiratory and circulatory systems are less efficient, and changes in the gastrointestinal tract may lead to increased constipation. Bone mass diminishes, especially among women, leading to bone density disorders such as osteoporosis. Muscles become weaker unless exercise programs are followed. The skin dries and becomes less flexible. Hair loss occurs in both sexes. There is also decreased sensitivity in all of the sensory modalities, including olfaction, taste, touch, hearing, and vision.

3. **Cognitive changes.** The study of cognitive changes in the older population is complex. Response speeds (neural and motor) have been reported to decline; some researchers believe that age-related decrease in working memory is the crucial factor underlying poorer performance by the elderly on cognitive tasks.
   - **Intellectual changes** in late adulthood do not always result in reduction of ability. While fluid intelligence (the ability to see and to use patterns and relationships to solve problems) does decline in later years, crystallized intelligence (the ability to use accumulated information to solve problems and make decisions) has been shown to rise slightly over the entire life span. K. Warner Schaie and Sherry Willis reported that a decline in cognitive performance could be reversed in 40% to 60% of elderly people who were given remedial training.
   - **Dementias** are usually responsible for cognitive defects seen in older people. These disorders, however, occur only in about 15% of people over 65. The leading cause of dementia in the United States is Alzheimer's disease, a progressive, eventually fatal disease that begins with confusion and memory lapses and ends with the loss of ability to care for oneself.
4. **Retirement.** Retirement at age 65 is the conventional choice for many people, although some work until much later. People have been found to be happier in retirement if they are not forced to retire before they are ready and if they have enough income to maintain an adequate living standard. Chronic health problems such as arthritis, rheumatism, and hypertension increasingly interfere with the quality of life of most individuals as they age.
5. **Widowhood.** Women tend to marry men older than they are and, on average, live 5 to 7 years longer than men. One study found ten times as many widows as widowers. Widowhood is particularly stressful if the death of the spouse occurs early in life; close support of friends, particularly other widows, can be very helpful.
6. **Death and dying.** Death and dying has been studied extensively by Elisabeth Kübler-Ross, who suggested that terminally ill patients display the following five basic reactions.
   - Denial, an attempt to deny the reality and to isolate oneself from the event, is frequently the first reaction.
   - Anger frequently follows, as the person envies the living and asks, "Why should I be the one to die?"
   - Bargaining may occur; the person pleads to God or others for more time.
   - As the end nears, recognition that death is inevitable and that separation from family will occur leads to feelings of exhaustion, futility, and deep depression.

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- Acceptance often follows if death is not sudden, and the person finds peace with the inevitable.

People who are dying are sometimes placed in a **hospice**, a hospital for the terminally ill that attempts to maintain a good quality of life for the patient and the family during the final days. In a predictable pattern after a loved one's death, initial shock is followed by grief, followed by apathy and depression, which may continue for weeks. Support groups and counseling can help in successfully working through this process.

4.5 SENSORY CHANGES IN OLD AGE

Vision: In late adulthood, all the senses show signs of decline, especially among the oldest-old. In the last chapter, you read about the visual changes that were beginning in middle adulthood, such as presbyopia, dry eyes, and problems seeing in dimmer light. By later adulthood these changes are much more common. Three serious eyes diseases are more common in older adults: Cataracts, macular degeneration, and glaucoma. Only the first can be effectively cured in most people.

Cataracts are a clouding of the lens of the eye. The lens of the eye is made up of mostly water and protein. The protein is precisely arranged to keep the lens clear, but with age some of the protein starts to clump. As more of the protein clumps together the clarity of the lens is reduced. While some adults in middle adulthood may show signs of cloudiness in the lens, the area affected is usually small enough to not interfere with vision. More people have problems with cataracts after age 60 (NIH, 2014b) and by age 75, 70% of adults will have problems with cataracts (Boyd, 2014). Cataracts also cause a discoloration of the lens, tinting it more yellow and then brown, which can interfere with the ability to distinguish colors such as black, brown, dark blue, or dark purple.

Risk factors besides age include certain health problems such as diabetes, high blood pressure, and obesity, behavioral factors such as smoking, other environmental factors such as prolonged exposure to ultraviolet sunlight, previous trauma to the eye, long- term use of steroid medication, and a family history of cataracts (NEI, 2016a; Boyd, 2014). Cataracts are treated by removing and replacing the lens of the eye with a synthetic lens. In developed countries, such as the United States, cataracts can be easily treated with surgery. However, in developing countries, access to such operations is limited, making cataracts the leading cause of blindness in late adulthood in Third World nations (Resnikoff, Pascolini, Mariotti & Pokharel, 2004). As shown in Figure 9.15, areas of the world with limited medical treatment for cataracts often results in people living more years with a serious disability. For example, of those living in the darkest red color on the map, more than 990 out of 100,00 people have a shortened lifespan due to the disability caused by cataracts.

Older adults are also more likely to develop age-related macular degeneration, which is the loss of clarity in the center field of vision, due to the deterioration of the macula, the center of the retina. Macular degeneration does not usually cause total vision loss, but the loss of the central field of vision can greatly impair day-to-day functioning. There are two types of macular degeneration: dry and wet. The dry type is the most common form and occurs when tiny pieces of a fatty protein called drusen form beneath the retina. Eventually the macular becomes thinner and stops working properly (Boyd, 2016). About

10% of people with macular degeneration have the wet type, which causes more damage to their central field of vision than the dry form. This form is caused by an abnormal development of blood vessels beneath the retina. These vessels may leak fluid or blood causing more rapid loss of vision than the dry form.

The risk factors for macular degeneration include smoking, which doubles your risk (NIH, 2015a); race, as it is more common among Caucasians than African Americans or Hispanics/Latinos; high cholesterol; and a family history of macular degeneration (Boyd, 2016). At least 20 different genes have been related to this eye disease, but there is no simple genetic test to determine your risk, despite claims by some genetic testing companies (NIH, 2015a). At present, there is no effective treatment for the dry type of macular degeneration. Some research suggests that certain patients may benefit from a cocktail of certain antioxidant vitamins and minerals, but the results are mixed at best. They are not a cure for the disease nor will they restore the vision that has been lost. This "cocktail" can slow the progression of visual loss in some people (Boyd, 2016; NIH, 2015a). For the wet type medications that slow the growth of abnormal blood vessels, and surgery, such as laser treatment to destroy the abnormal blood vessels may be used. Only 25% of those with the wet version may see improvement with these procedures (Boyd, 2016).

A third vision problem that increases with age is glaucoma, which is the loss of peripheral vision, frequently due to a buildup of fluid in eye that damages the optic nerve. As you age the pressure in the eye may increase causing damage to the optic nerve. The exterior of the optic nerve receives input from retinal cells on the periphery, and as glaucoma progresses more and more of the peripheral visual field deteriorates toward the central field of vision. In the advanced stages of glaucoma, a person can lose their sight. Fortunately, glaucoma tends to progresses slowly (NEI, 2016b). Glaucoma is the most common cause of blindness in the U.S. (NEI, 2016b). African Americans over age 40, and everyone else over age 60 has a higher risk for glaucoma. Those with diabetes, and with a family history of glaucoma also have a higher risk (Owsley et al., 2015). There is no cure for glaucoma, but its rate of progression can be slowed, especially with early diagnosis. Routine eye exams to measure eye pressure and examination of the optic nerve can detect both the risk and presence of glaucoma (NEI, 2016b). Those with elevated eye pressure are given medicated eye drops. Reducing eye pressure lowers the risk of developing glaucoma or slow its progression in those who already have it.

Figure: Normal Vision vs. Cataracts, Macular Degeneration and Glaucoma

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Hearing: As you read in Chapter 8, our hearing declines both in terms of the frequencies of sound we can detect and the intensity of sound needed to hear as we age. These changes continue in late adulthood. Almost 1 in 4 adults aged 65 to 74 and 1 in 2 aged 75 and older have disabling hearing loss (NIH, 2016). Table 9.4 lists some common signs of hearing loss.

Have trouble hearing over the telephone

Find it hard to follow conversations when two or more people are talking

Often ask people to repeat what they are saying

Need to turn up the TV volume so loud that others complain

Have a problem hearing because of background noise

Think that others seem to mumble

Can't understand when women and children speak to you

Presbycusis is a common form of hearing loss in late adulthood that results in a gradual loss of hearing. It runs in families and affects hearing in both ears (NIA, 2015c). Older adults may also notice tinnitus, a ringing, hissing, or roaring sound in the ears. The exact cause of tinnitus is unknown, although it can be related to hypertension and allergies. It may come and go or persist and get worse over time (NIA, 2015c). The incidence of both presbycusis and tinnitus increase with age and males have higher rates of both around the world (McCormak, Edmondson-Jones, Somerset, & Hall, 2016). Your auditory system has two jobs: To help you to hear, and to help you maintain balance. Your balance is controlled by the brain receiving information from the shifting of hair cells in the inner ear about the position and orientation of the body. With age this function of the inner ear declines which can lead to problems with balance when sitting, standing, or moving (Martin, 2014).

Taste and Smell: Our sense of taste and smell are part of our chemical sensing system. Our sense of taste, or gustation, appears to age well. Normal taste occurs when molecules that are released by chewing food stimulate taste buds along the tongue, the roof of the mouth, and in the lining of the throat. These cells send messages to the brain, where specific tastes are identified. After age 50 we start to lose some of these sensory cells. Most people do not notice any changes in taste until ones 60s (NIH: Senior Health, 2016b). Given that the loss of taste buds is very gradual, even in late adulthood, many people are often surprised that their loss of taste is most likely the result of a loss of smell.

Types of Smell Disorders	
Presbyosmia	Smell loss due to aging
Hyposmia	Loss of only certain odors
Anosmia	Total loss of smell
Dysosmia	Change in the perception of odors. Familiar odors are distorted.
Phantosmia	Smell odors that are not present

Our sense of smell, or olfaction, decreases more with age, and problems with the sense of smell are more common in men than in women. Almost 1 in 4 males in their 60s have a disorder with the sense of smell, while only 1 in 10 women do (NIH: Senior Health, 2016b). This loss of smell due to aging is called presbyosmia. Olfactory cells are located in a small area high in the nasal cavity. These cells are stimulated by two pathways; when we inhale through the nose, or via the connection between the nose and the throat when we chew and digest food. It is a problem with this second pathway that explains why some foods such as chocolate or coffee seem tasteless when we have a head cold. There are several types of loss of smell. Total loss of smell, or anosmia, is extremely rare.

Problems with our chemical senses can be linked to other serious medical conditions such as Parkinson's, Alzheimer's, or multiple sclerosis (NIH: Senior Health, 2016a). Any sudden change should be checked out. Loss of smell can change a person's diet, with either a loss of enjoyment of food and eating too little for balanced nutrition, or adding sugar and salt to foods that are becoming blander to the palette.

Touch: Research has found that with age, people may experience reduced or changed sensations of vibration, cold, heat, pressure, or pain (Martin, 2014). Many of these changes are also aligned with a number of medical conditions that are more common among the elderly, such as diabetes. However, there are changes in the touch sensations among healthy older adults. The ability to detect changes in pressure have been shown to decline with age, with it being more pronounced by the 6th decade and diminishing further with advanced age (Bowden & McNelty, 2013). Yet, there is considerable variability, with almost 40% showing sensitivity that is comparable to younger adults (Thornbury & Mistretta, 1981). However, the ability to detect the roughness/smoothness or hardness/softness of an object shows no appreciable change with age (Bowden & McNulty, 2013). Those who show increasing insensitivity to pressure, temperature, or pain are at risk for injury (Martin, 2014).

Pain: According to Molton and Terrill (2014), approximately 60%-75% of people over the age of 65 report at least some chronic pain, and this rate is even higher for those individuals living in nursing homes. Although the presence of pain increases with age, older adults are less sensitive to pain than younger adults (Harkins, Price, & Martinelli, 1986). Farrell (2012) looked at research studies that included neuroimaging techniques involving older people who were healthy and those who experienced a painful disorder. Results indicated that there were age-related decreases in brain volume in those structures

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involved in pain. Especially noteworthy were changes in the prefrontal cortex, brainstem, and hippocampus. Women are more likely to identify feeling pain than men (Tsang et al., 2008). Women have fewer opioid receptors in the brain, and women also receive less relief from opiate drugs (Garrett, 2015). Because pain serves an important indicator that there is something wrong, a decreased sensitivity to pain in older adults is a concern because it can conceal illnesses or injuries requiring medical attention.

Chronic health problems, including arthritis, cancer, diabetes, joint pain, sciatica, and shingles are responsible for most of the pain felt by older adults (Molton & Terrill, 2014). Cancer is a special concern, especially "breakthrough pain" which is a severe pain that comes on quickly while a patient is already medicated with a long-acting painkiller. It can be very upsetting, and after one attack many people worry it will happen again. Some older individuals worry about developing an addiction to pain medication, but if medicine is taken exactly as prescribed, addiction should not be a concern (NIH, 2015b). Lastly, side effects from pain medicine including constipation, dry mouth, and drowsiness may occur that can adversely affect the elder's life. Some older individuals put off going to the doctor because they think pain is just part of aging and nothing can help. Of course, this is not true. Managing pain is crucial to ensure feelings of well-being for the older adult. When chronic pain is not managed, the individual will restrict their movements for fear of feeling pain or injuring themselves further. This lack of activity will result in more restriction, further decreased participation, and greater disability (Jensen, Moore, Bockow, Ehde, & Engel, 2011). A decline in physical activity because of pain is also associated with weight gain and obesity in adults (Strine, Hootman, Chapman, Okoro, & Balluz, 2005). Additionally sleep and mood disorders, such as depression, can also occur (Moton & Terrill, 2014). Learning to cope effectively with pain is an important consideration in late adulthood, and working with one's primary physician or a pain specialist is recommended (NIH, 2015b).

4.6 INTELLIGENCE AND MEMORY

People often fear that aging will cause their intellect to disappear, giving way to cognitive impairment and irrationality. However, intellectual decline is not an inevitable consequence of aging. Research does not support the stereotypic notion of the elderly losing general cognitive functioning or that such loss, when it does occur, is necessarily disruptive. Older adults tend to learn more slowly and perform less well on tasks involving imagination and memorization than do younger adults, but what older adults may be lacking in terms of specific mental tasks, they make up for in wisdom, or expert and practical knowledge based on life experience.

Many older adults complain about not being able to remember things as well as they once could. Memory problems seem to be due to sensory storage problems in the short-term rather than long-term memory processes. That is, older adults tend to have much less difficulty recalling names and places from long ago than they do acquiring and recalling new information.

Practice and repetition may help minimize the decline of memory and other cognitive functions. Researchers have found that older adults can improve their scores on assorted tests of mental abilities with only a few hours of training. Working puzzles, having hobbies,

learning to use a computer, and reading are a few examples of activities or approaches to learning that can make a difference in older adults' memory and cognitive functions.

4.7 HEALTH IN OLD AGE

Cognitive and mental health

For most older adults, age-associated changes in cognition (thinking) are mild and do not significantly interfere with daily functioning. Older adults are capable of learning new skills even late in life, though learning may take longer than for younger adults. Short-term memory shows noticeable changes with age, but long-term memory declines less with age. Some changes in cognition are normal with age, such as slower reaction times and reduced problem-solving abilities. The speed with which information is encoded, stored and retrieved also slows as we age. However, many older adults outperform their younger counterparts on intelligence tests that draw on accumulated knowledge and experience. Wisdom and creativity often continue to the very end of life. Personality traits remain relatively stable over time. For example, people who were outgoing during young adulthood are likely to be outgoing in later life. Most older adults report good mental health and have fewer mental health problems than other age groups. However, one in four older adults experiences a mental health problem such as depression, anxiety, schizophrenia, or dementia. The suicide rate for men over 85 is higher than that of any other age group. The number of older adults with substance abuse problems is expected to double to five million by 2020. Dementia (including Alzheimer's disease, the most common type of dementia) is not a normal part of aging. Approximately 5 percent of individuals between 71 and 79 and 37 percent of the population above age 90 are affected. As they age, people are generally more satisfied with their lives and more optimistic about growing older.

Physical health

A number of physical changes and health issues are more common as we age. However, just as all older adults are not the same, their health status also varies. Many are active and healthy, whereas others are frail, with multiple health conditions.

Approximately 92 percent of older adults have at least one chronic condition, and 77 percent have two or more. Four chronic conditions — heart disease, cancer, stroke, and diabetes — cause almost two-thirds of all deaths among individuals 65 and older each year. People 55 and older account for over a quarter of all Americans diagnosed with HIV, and this number is increasing. Hearing impairment among older adults is often mild or moderate, yet it is widespread; almost 25 percent of adults aged 65–74 and 50 percent aged 75 and older have a hearing impairment that is often isolating. Visual changes among aging adults result in such problems as slower reading speed and difficulty reading small print and in dim light, as well as difficulty driving at night. The proportion of older adults needing assistance with everyday activities increases with age. Fewer than one-fifth of older adults between ages 65 and 74 need assistance with activities of daily living, such as bathing or eating. This increases to 40 percent of men and 53 percent of women over 85 who need such assistance. Older ethnic and racial minorities have a higher prevalence of obesity, diabetes, and hypertension, as well as an earlier onset of chronic illness, than White older adults. Some of the factors contributing to this disparity are poverty, segregated

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communities with fewer health-promoting resources, poor education, unemployment, discrimination, and less access to quality health care. In spite of these mental and physical health issues, two-thirds of older adults who are not living in long-term care settings report their health to be good, very good or excellent compared to others their age.

4.8 PHYSICAL DEVELOPMENT

Daniel Levinson depicts the late adulthood period as those years that encompass age 65 and beyond. Other developmental psychologists further divide later adulthood into young-old (ages 65–85) and old-old (ages 85 and beyond) stages. Today, 13 percent of the population is over the age of 65, compared with 3 percent at the beginning of this century. This dramatic increase in the demographics of older adulthood has given rise to the discipline of gerontology, or the study of old age and aging. Gerontologists are particularly interested in confronting ageism, prejudice, and discrimination against older adults.

Aging inevitably means physical decline, some of which may be due to lifestyles, such as poor diet and lack of exercise, rather than illness or the aging process. Energy reserves dwindle. Cells decay. Muscle mass decreases. The immune system is no longer as capable as it once was in guarding against disease. Body systems and organs, such as the heart and lungs, become less efficient. Overall, regardless of people's best hopes and efforts, aging translates into decline. Even so, the speed at which people age, as well as how aging affects their outlook on life, varies from person to person. In older adulthood, people experience both gains and losses. For instance, while energy is lost, the ability to conserve energy is gained. Age also brings understanding, patience, experience, and wisdom—qualities that improve life regardless of the physical changes that may occur.

Aging in late adulthood profoundly affects appearance, sensation, and motor abilities. An older adult's appearance changes as wrinkles appear and the skin becomes less elastic and thin. Small blood vessels break beneath the surface of the skin, and warts, skin tags, and age spots (liver spots) may form on the body. Hair thins and turns gray as melanin decreases, and height lessens perhaps by an inch or two as bone density decreases. The double standard of aging applies to men and women in older adulthood just as it did in middle adulthood. Older men may still be seen as distinguished, while older women are labeled as grandmotherly, over the hill, and past the prime of life.

During late adulthood, the senses begin to dull. With age, the lenses of the eye discolour and become rigid, interfering with the perception of color and distance and the ability to read. Without corrective glasses, nearly half the elderly population would be legally blind. Hearing also diminishes, especially the ability to detect high-pitched sounds. As a result, the elderly may develop suspiciousness or even a mild form of paranoia—unfounded distrustfulness—in response to not being able to hear well. They may attribute bad intentions to those whom they believe are whispering or talking about them, rather than correctly attributing their problems to bad hearing. Hearing problems can be corrected with hearing aids, which are widely available.

The sense of taste remains fairly intact into old age, even though the elderly may have difficulty distinguishing tastes within blended foods. By old age, however, the sense of smell

shows a marked decline. Both of these declines in sensation may be due to medications, such as antihypertensives, as well as physical changes associated with old age.

In addition to changes in appearance and the dulli,ng of the senses, reflexes slow and fine motor abilities continue to decrease with old age. By late adulthood, most adults have noticed a gradual reduction in their response time to spontaneous events. This is especially true of older adults who drive. While routine maneuvers on familiar streets may pose fewer problems than novel driving situations, older adults' reaction times eventually decline to the point that operating a vehicle ielderlyardous. However, many elderlies are hesitant to give up driving because the sacrifice would represent the end of their personal autonomy and freedom.

Generally, older adults score lower overall on tests of manual dexterity than do younger adults. Older adults may find that their fine motor skills and performance speed decrease in some areas but not in others. For instance, an elderly lifelong pianist may continue to exhibit incredible finger dexterity at the keyboard, but may at the same time find that taking up needlepoint as a hobby is too difficult. Aging also takes its toll on sexuality. Older women produce less vaginal lubrication, and the vagina becomes less stretchable because of reduced levels of female hormones. Older men are less able to attain erections and orgasms than younger men. This may be due to reduced levels of testosterone and fewer secretions from the accessory sex glands. Likewise, older men have less urge to ejaculate, and their refractory periods, or the waiting time before they can regain an erection, may last longer.

Physical changes in sexual ability don't have to prevent older adults from enjoying sex. Although fewer orgasmic contractions, orgasm continues to be a pleasurable event for both genders. In fact, older people may find sex to be slower and more sensual. Older women relax because they no longer fear pregnancy, older men's erections last longer, and neither is as anxious, insecure or hurried as they may have been decades before. The regular sexual practice also may help older adults maintain their sexual interest and prowess.

4.9 PSYCHOLOGICAL HAZARDS

Mental problems are well recognized health issue in the elderly. It is estimated that approximately one fifth of the global elderly population suffers from some form of psychological disorder which prevents them from independently performing everyday activities. As a society, we sometimes perceive intellectual and mental decline almost as a natural consequence of ageing. On the other hand, stigma that surrounds these conditions often prevents elderly people and their families from seeking professional help and assistance. Support and care are crucial when we discuss about how to overcome the challenges related to psychological problems in the old age.

What are the risk factors?

The spectrum of risk factors responsible for developing psychological problems in old age is quite extensive. Multiple chronic illnesses, especially those of cardiovascular and cerebrovascular origin (hypertension, stroke, coronary heart disease) may have direct

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consequences to the brain, thereby producing cognitive disturbances and mental issues. Chronic pain is a perfect trigger of psychological distress in the old age. Hospital admission and any change of the environment (moving to a care setting) can also have a negative impact for the overall psychological well-being in the elderly. Social isolation, reduced income during retirement and loss of close family members are significant stressors to cope with – these may produce severe psychological disturbances leading to anxiety or depression. In fact, any severe and long-term illness, such as cancer, tends to affect the behavioral and psychological status of an older person. Sadly, people of older age are also recognized as a population group prone to abuse. There is evidence that one in six older people will experience some type of abuse. Loss of dignity and respect is, not surprisingly, tightly linked with severe psychological issues.

Are there any symptoms?

Close family members and caregivers should be aware of signs and symptoms related to mental disorders in the elderly in order to seek professional help in a timely manner. When we see our loved one's age, occasional forgetfulness is usually not something to especially worry about. However, persistent loss of memory is a clear indication of a severe health condition needing medical attention. Significant changes in appearance including changes in clothing may implicate a psychological and behavioral problem. Confusion, disorientation, inability to concentrate or make decisions represent early signs of cognitive decline and dementia. If you experience that your loved ones persistently ask the same questions, forget important dates, frequently misplace their belongings, this is a clear sign to refer them to a medical professional.

It is advisable to especially keep an eye on the feelings of guilt, worthlessness, helplessness – such symptoms are linked with depression. Mood swings, ranging from e.g., being carefree to anxious are indicative of psychological issues. Inability to cope with everyday routine, problems in maintaining hygiene, home or garden should not be disregarded – they are often a sign of mental illness in older people. Noticing any type of social withdrawal should be taken seriously. If your loved ones lose interest in social activities that they used to be excited about, or just avoid regular social engagements, you should consider seeking professional support for them.

Common psychological issues in old age

It is probably not that surprising that cognitive decline and dementia represent the most common mental health disorder in people older than 65 years. This severe and progressive disease affects approximately five million senior Americans or fifty million seniors worldwide. Concerning is the fact that this number will almost triple in the next twenty years. The disease by itself is estimated to take more lives than breast and prostate cancer combined. Any type of dementia can produce significant physical, emotional and economic pressure to patients and their caregivers. This is why an early diagnosis and appropriate care are essential for patients and their caregivers.

Depression and mood disorders are also quite frequent among seniors, however, the problem with this health condition is that it often goes undiagnosed and, therefore, untreated. Center for Disease Control (CDC) estimates that 5% of elderly individuals

suffer from depressive disorder. It is worth mentioning that some medications such as those for the treatment of increased blood pressure may cause depression. Sadness is not the only symptom. Lack of motivation and energy are the usual complaints linked to depression. Prolonged suffering and impairment in performing daily activities are well recognized consequences of untreated depression. Timely diagnosis, accompanied with adequate treatment, care and support is crucial for increasing the quality of life of elderly individuals.

Anxiety is also quite prevalent and may encompass a wide range of mental issues including obsessive-compulsive disorder, post-traumatic stress disorder, panic disorder or phobias. Women are more prone to anxiety than men. Anxiety related disorders tend to occur after a stressful situation such as loss of a spouse or side by side to other chronic and prolonged disease. As in depression, anxiety disorders are usually overseen in elderly individuals, which may have severe implications to the overall well-being of seniors.

Sleep disorders including are common among seniors. Prolonged time needed to fall asleep (usually more than 45 minutes), trouble in maintaining sleep with frequent periods of being awake during night, as well as short overall duration of sleep represent clear signs of insomnia. Proper sleep is very important as it will reduce the probability of a severe psychological disorder. Maintaining a "sleep hygiene" reduces the need for sleep medications, which are sometimes responsible for memory impairment or poor daytime performance.

Is there a solution (psychotherapy)?

It is important to mention that all of the above-mentioned disorders may coexist, and it is usually the case that seniors suffer from more than just one mental disorder. This is why they need all our support. WHO clearly recommends as a standard of care both psychological and medicinal treatment of seniors affected with mental disorders? This approach is essential for improving both physical and mental health and keeping an optimal quality of life of elderly individuals. The demand for care and support of seniors with mental issues will increase as the elderly population grows. Providing a timely, high-quality professional help to older people directly reduces the number of complications that may arise as a consequence of mental disorders and prolongs the physical and emotional well-being of the elderly.

4.10 CHAPTER SUMMARY

Old age is the closing period in the life span. Age sixty is usually considered the dividing line between middle and old age. Chronological age is a poor criterion to use in marking off the beginning of old age because there are such marked differences among individuals in the age and better aging begins. Because of better living conditions and health care, most men and women today do not show the mental and physical signs of aging until the early seventies. The characteristics of old age are far more likely to lead to poor adjustment than to good and unhappiness rather than happiness. That is why old age is even more dreaded than middle age. Mental or physical decline does not necessarily have to occur. Persons can remain vigorous, active, and dignified until their eighties or even nineties. In fact, the older persons have vast reservoir of knowledge, experience, and wisdom

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on which the community can draw. In view of increase in life expectancy increasingly greater proportion of society is joining the group of aged people. Late adulthood (old age) is generally considered to begin at about age 65. Erik Erikson suggests that at this time it is important to find meaning and satisfaction in life rather than to become bitter and disillusioned, that is, to resolve the conflict of integrity vs. despair. In late adulthood, all the senses show signs of decline, especially among the oldest-old. In the last chapter, you read about the visual changes that were beginning in middle adulthood, such as presbyopia, dry eyes, and problems seeing in dimmer light. By later adulthood these changes are much more common. Chronic health problems, including arthritis, cancer, diabetes, joint pain, sciatica, and shingles are responsible for most of the pain felt by older adults (Molton & Terrill, 2014). Cancer is a special concern, especially "breakthrough pain" which is a severe pain that comes on quickly while a patient is already medicated with a long-acting painkiller. People often fear that aging will cause their intellect to disappear, giving way to cognitive impairment and irrationality. However, intellectual decline is not an inevitable consequence of aging. Research does not support the stereotypic notion of the elderly losing general cognitive functioning or that such loss, when it does occur, is necessarily disruptive. Older adults tend to learn more slowly and perform less well on tasks involving imagination and memorization than do younger adults, but what older adults may be lacking in terms of specific mental tasks, they make up for in wisdom, or expert and practical knowledge based on life experience. Approximately 92 percent of older adults have at least one chronic condition, and 77 percent have two or more. Four chronic conditions — heart disease, cancer, stroke, and diabetes — cause almost two-thirds of all deaths among individuals 65 and older each year. People 55 and older account for over a quarter of all Americans diagnosed with HIV, and this number is increasing. Aging in late adulthood profoundly affects appearance, sensation, and motor abilities. An older adult's appearance changes as wrinkles appear and the skin becomes less elastic and thin. Small blood vessels break beneath the surface of the skin, and warts, skin tags, and age spots (liver spots) may form on the body. Mental problems are well recognized health issue in the elderly. It is estimated that approximately one fifth of the global elderly population suffers from some form of psychological disorder which prevents them from independently performing everyday activities.

4.11 REVIEW QUESTIONS

SHORT ANSWER TYPE QUESTIONS

1. **What do you understand by old age?**
2. **Explain cognitive and mental health.**
3. **Explain physical health.**
4. **Is there a solution (psychotherapy)?**
5. **Explain any one sensory problem in old age.**

LONG ANSWER TYPE QUESTIONS

1. **Explain characteristics of old age.**

2. **What do you understand by development in late adulthood?**
3. **Elaborate the sensory changes in old age.**
4. **Explain physical development.**
5. **Explain psychological hazards.**

4.12 MULTIPLE CHOICE QUESTIONS

1. **A third vision problem that increases with age is glaucoma, which is the loss of _____.**
   a. Peripheral vision
   b. Macular degeneration
   c. Cataracts
   d. None of the above
2. **Practice and repetition may help minimize the decline of _____ and other cognitive functions.**
   a. Memory
   b. Mental illness
   c. Physical challenges
   d. Vision
3. **The sense of _____ remains fairly intact into old age, even though the elderly may have difficulty distinguishing tastes within blended foods.**
   a. Smell
   b. Hearing
   c. Taste
   d. Vision
4. **Multiple _____, especially those of cardiovascular and cerebrovascular origin (hypertension, stroke, coronary heart disease) may have direct consequences to the brain, thereby producing cognitive disturbances and mental issues.**
   a. Chronic pain
   b. Chronic illness
   c. Both of the above
   d. None of the above
5. **_____ is a perfect trigger of psychological distress in the old age.**
   a. Chronic pain
   b. Chronic illness
   c. Both of the above
   d. None of the above
6. **Significant changes in appearance including changes in clothing may implicate a psychological and _____.**
   a. Memory problem
   b. Physical problem

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c. Sensory problem
d. Behavioral problem

7. _____ is also quite prevalent and may encompass a wide range of mental issues including obsessive-compulsive disorder, post-traumatic stress disorder, panic disorder or phobias. Women are more prone to anxiety than men.

a. Depression
b. Blood pressure
c. Anxiety
d. Sleep disorders

8. CDC is stand for:

a. Center for Disease Control
b. Center for Disable Control
c. Center for Disease Centre
d. None of the above

9. _____ are a clouding of the lens of the eye.

a. Peripheral vision
b. Macular degeneration
c. Cataracts
d. None of the above

10. The ability to detect changes in pressure have been shown to decline with age:

a. Smell
b. Hearing
c. Taste
d. Touch

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UNIT V

HAZARDS OF OLD AGE

STRUCTURE

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5.1 LEARNING OBJECTIVE

After learning this unit, students will be able to:

- Understand the Social Issues Related to Aging.
- Understand the Vocational and Family Hazards of Old Age.
- Understand the Relationships in Old Age.
- Understand the Work and Retirement.
- Understand the Living Arrangements for The Elderly.
- Understand the Death: Facing Death & Three Aspects of Death.

5.2 SOCIAL ISSUES RELATED TO AGING

It is well known that as a society we are living much longer thanks to improved living conditions and health care. While being able to reach old age is something to be thankful for, in many ways, there are several challenges facing the elderly, which we all need to pay more attention to. Often it is not until we start to age ourselves or we see a loved one struggling that we sit up and take notice, but as a society, we can do more to make life easier for our aging population. This article outlines the biggest challenges that elderly people face today and how we can support them and enable them to age with dignity.

Ageism and a lost sense of purpose

There are lots of outdated stereotypes about elderly people, which can lead to isolation and marginalization in a lot of communities. By coming up with innovative ways to involve older people in the community through social events, we can not only help them to maintain a sense of identity and self-esteem but also tap into the wealth of knowledge and experience they have, which is so vital for the development of society.

Financial insecurity

While we are living longer, unfortunately, the world of employment and retirement has not evolved at the same pace. Many elderly people are able and more than willing to work past the standard retirement age, but the opportunities are not there. In addition, managing day to day finances and planning for later life can be challenging for older generations as much is now done online or remotely. This can also leave them more vulnerable to fraud and scams.

Difficulty with everyday tasks and mobility

A person's mobility and dexterity will naturally decline as they age, which makes completing everyday tasks more difficult. This can gradually cause people to care for themselves and prevents them from being social, pursuing interests, or taking part in activities they enjoy. More support is needed to enable elderly people not only to live independently through products and programs which focus on safety, balance, fitness, and mobility but also to ensure they can continue to thrive as an individual.

Finding the right care provision

When complete independence is no longer practical, many elderly people require additional care. Sometimes this care can be provided by family members, but this can

place a lot of strain on the caregiver in terms of balancing this with work and other family responsibilities. These caregivers need to be given the training, resources, and emotional support necessary to help them deliver the best care for their loved ones and themselves. In some cases, it is more appropriate for a professional caregiver to be employed on a regular basis, e.g., when there are complex medical conditions and/or physical disabilities. With a comprehensive elder care service, the elderly person is able to remain in their own home.

Access to healthcare services

Healthcare can be complicated and disjointed for elderly people, especially for those struggling with long-term conditions. The care requires lots of different medical professionals and clinics to coordinate the delivery of medication and other types of care.

End-of-life preparations

We all need to prepare for the inevitable, but death is often a difficult topic for people to discuss or make plans for. Elderly individuals and their families need support when considering the end-of-life options available, financial implications, and how to ensure that the individual's wishes are respected.

With aging, the ability to do daily activities (functional ability) declines to some degree in every person. Also, older people, on average, tend to have more disorders and disabilities than do younger people. But the changes that accompany aging are more than just changes in health. Social issues (such as living arrangements or type of daily activities) influence an older person's risk and experience of illness.

Doctors often do what is called a social history to help them and other members of the health care team evaluate a person's care needs and social support. Doctors use the social history to help the older person and any caregivers make plans for care. Doctors may ask questions about the following:

- Familial and marital or companion status
- Living arrangements
- Financial status
- Work history
- Education
- Typical daily activities (for example, how meals are prepared, what activities add meaning to life, and where problems may be occurring)
- Need for and availability of caregivers
- History of losses, traumas (for example, patterns of family violence, episodes of sexual assault, or lifetimes of racial oppression), and the coping strengths borne out of adversity
- History of substance use and legal issues
- The older person's own caregiving responsibilities (because older people who are caring for family members may be reluctant to report their own symptoms lest any resulting medical procedures or hospitalization interfere with caregiving)

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5.3 VOCATIONAL AND FAMILY HAZARDS OF OLD AGE

Loneliness

The second almost universal family-life hazard to good adjustment in old age is loneliness. Even when grown children live nearby, the elderly person's contacts with them may be only occasional, and their companionship far less than was the case when the three-generation household was more usual than it is today.

One of the most common causes of loneliness in old age is loss of a spouse. While many elderly people acknowledge the possibility of the death of a spouse and make plans for it, relatively few realize the problems involved and are prepared to meet them or to adjust to the loneliness that it brings. Women, as a group, are generally better prepared psychologically for the death of a spouse than men. Heyman and Gianturco have explained the reason for this:

The elderly widow seems psychologically prepared to accept the death of the spouse through death rehearsal and lessening of social pressures, and she adjusts by maintaining a high rate of social activities. Religious convictions appear to be particularly important sources of strength.

Living Arrangements

The third major family-life hazard in old age involves living arrangements. These may be physically or psychologically hazardous or both. Physically, it may be hazardous for elderly people to remain in the homes they have occupied since the early years of marriage because these homes are likely to be too large for them to take care of without overtaxing their strength or straining their limited financial resources to provide domestic help.

Remaining in their old homes may be psychologically hazardous to good adjustment by being a constant reminder of happier times or by requiring such a large portion of income to maintain that cutting down must be done in other areas, such as clothes, travel, or participation in community activities.

If elderly people move to places that are better suited to their needs, the physical hazards may be reduced but the psychological hazards may increase. If, for example, their health or financial situations force them to live with a married child or in an institution, they may resist the change and thus adjust poorly to their new environment. Moving to an area where climatic conditions are more favorable may likewise reduce physical hazards but increase psychological ones if the move creates loneliness.

Another common psychological hazard that may occur when elderly people move, even if they stay in the same community, is not being able to keep all their cherished possessions. If they go to live in smaller homes of their own, in the homes of married children or other relatives, or in institutions, they may have to give up much of the furniture, China, pictures, and other material possessions that served as status symbols for many years. They may also have to give up hobbies, such as gardening if their new homes do not provide opportunities for such pursuits. This may leave them with a feeling of uselessness which will complicate the adjustments they must make to new living arrangements.

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Role Changes

The fourth major family-life hazard in old age, and unquestionably one of the most serious, is the necessity for making role changes. As has been stressed repeatedly, role changes are always difficult and emotion-provoking. They become increasingly more difficult with each passing year. The more radical the change and the less prestige there is associated with the new role, the more the change will be resisted and the more disturbed the individual will be if forced by circumstances to make the change.

The man or woman who has been accustomed to playing the role of head of the household or of family breadwinner will find it difficult to live as a dependent in the home of a grown child. Similarly, the man who has achieved a position of prestige and responsibility in the vocational world will find it very difficult to become his wife's "helper" when he retires, a role that implies lack of authority and masculinity. This militates against good adjustment not only to retirement but also to family life. In time it may have a profoundly unfavorable effect on the self-concept, thus leading to poor personal and social adjustments.

Adjustments in old age

Some of the adjustments people have to make as they move into old age include:

Health adjustment: One of the threats to the elderly is prolonged illness. The aging body is highly vulnerable to ravaging diseases and injury. The psycho-logical stressors of old age can also pro-voke psychological disorders.

Adjustment to retirement: Retirement is separation from a sphere of activity that has provided special social order, economic remuneration, personal identity and prestige for many years. The abrupt termination of one's livelihood may be a great threat to the old people; a welcome relief to some from tedious thankless jobs or a natural conclusion of one's successful career. It may pro-vide more time for some to pursue their dreams and pleasurable activities.

5.4 RELATIONSHIPS IN OLD AGE

Given increases in longevity, today's older adults face the possibility of acquiring and maintaining relationships far longer than during any other time in modern history. For instance, nearly 1 in 10 adults over the age of 65 has a child who is also within the older adult age range. Nurturing long-term family relationships can be both rewarding and challenging. While middle and older adults may enjoy the peaceful relationships that develop over the decades in place of sibling rivalry, younger adults may feel the strain of trying to care for their aging and ailing parents, grandparents, and other relatives. Even so, most young people report that they have satisfying relationships with their older family members.

Marriage and family

Older adult marriages and families are sometimes referred to as retirement marriages or retirement families. In such families, the following demographics are typical: The average age of the wife is 68, and the husband, is 71; they have been married for over 40 years and report high levels of marital satisfaction; they have three grown children, the oldest being about 40; and 20 percent of the husbands and 4 percent of the wives continue to work,

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even though they consider themselves retired. For these families, the typical household finances are less than in earlier stages of the life span.

By far the most devastating event in older adult marriages is widowhood or the disruption of marriage due to the death of the spouse. Nearly 3 percent of men (widowers) and 12 percent of women (widows) in the United States are widowed. In the 75 and older age group, approximately 25 percent of men and 66 percent of women are widowed.

One common complaint of widows and widowers is the difficulty they experience finding a new spouse or partner. This is especially true of widows, who must contend with the social stigmas of being old and asexual in a youth-oriented society. Widows tend to outnumber widowers in retirement communities, assisted living facilities, and nursing homes.

Late adulthood and sexuality

Perhaps no other topic lends itself to misconception more than that of sexuality among the elderly. The notion that a dramatic reduction in the frequency of sexual activity occurs after middle age is groundless. The best predictor of future sexual behavior is present and past sexual behavior: The more sexually active a person is and was in earlier years, the more active she or he will likely be in later years. Setting aside unfounded expectations about sex and the elderly, the main sexual problem that older adults face is finding a fitting partner. This is a special problem for older women, who—with a greater life expectancy than older men—find themselves with few or no options for potential sex partners. Furthermore, contemporary society typically accepts older men marrying younger women, but not the reverse, which leaves older women with one option—celibacy.

Aging rarely means that youthful activities come to a halt, just that they must be approached more creatively. This shift of pace and perspective is true of jogging (where running replaces sprinting) and golfing (where carting replaces walking), as well as of sex (where patience and understanding replace fast and furious lovemaking). In none of these instances does aging have to interfere with enjoying the activity. Even when misconceptions are challenged, however, society still holds negative ideas about sex in late adulthood. Many people see elderly sex as passionless, sickly, and dull. To help put an end to these attitudes, researcher Edward Brecher recommended that sexually active older adults be more open about their sexuality. In this way, younger members of society can see what joys these later years can hold for loving, healthy adults.

Relationships with adult children

The majority of older Americans—some 80 to 90 percent—have grown children, and enjoy frequent contact with them. Contrary to popular misconceptions, while the elderly enjoy these contacts, they do not want to live with their grown children. Instead, they want to live in their own homes and remain independent for as long as possible. They typically would rather move into a private room in an assisted living facility or group home than move in with their children. At any one time, only about 5 percent of adults over age 65 live in an institution; the other 95 percent either live alone or with a spouse, other relative, or a nonrelative. People over 65 are, however, more likely than any other age group to reside in an institutionalized setting at some point in their later lives. Over

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75 percent of institutionalized older adults live within an hour's drive of one of their children.

As for the quality of the relationships between older adults and their grown children, most research suggests that the elderly rate their experiences as positive. This response is most likely to reflect the older adults' good health, and the common interests (for instance, church or hobbies) and similar views (such as politics, religion, child-rearing) that they share with their children. The elderly do not necessarily rate frequent contacts with their children as positive when these take place as a result of long-term illness or family problems (such as a daughter's divorce).

Elderly abuse

One particularly disturbing aspect of older adulthood is the potential for elderly abuse, or the neglect and/or physical and emotional abuse of dependent elderly persons. Neglect may take the form of caregivers withholding food or medications, not changing bed linens, or failing to provide proper hygienic conditions. Physical abuse may include striking, shoving, shaking, punching, or kicking the elderly, while emotional abuse may consist of verbal threats, swearing, and insults. In the United States, an estimated 5 percent of older adults are abused each year.

Elderly abuse can occur in institutions, but it more commonly happens in the homes of the older person's spouse, children, or grandchildren. The typical victim is an older adult who is in poor health and who lives with someone else. In fact, the person who lives alone is at low risk of becoming a victim of this form of abuse. Both victims and abusers require treatment, whether individual, family, or group therapy. The main goal, however, is to ensure the safety of the elderly victim. Many licensed professionals, such as clinical psychologists, are required by law to report known cases of elderly abuse to the authorities.

Relationships with grandchildren

Because people become grandparents at an average age of 52 for men and 50 for women, grandparenting is hardly restricted to older adults. Older adults, however, often have more free time for their grandchildren. Middle adults often have less time because of work and other responsibilities. Although often idealized, grandparenting is a role that takes on different dimensions with individual situations, and the quality of grandparent-grandchild relationships varies across families. Generally, the majority of grandparents report having warm and loving relationships with their grandchildren. Besides helping their grandchildren develop an appreciation for the past, positive grandparenting helps older adults avoid isolation and dependence while finding additional meaning and purpose in life. Grandparenting also facilitates personality development in later life by allowing older adults opportunities to re-examine and rework the tasks of earlier psychosocial stages.

Friendships

Having close friends in later life, like any other period, is consistently associated with happiness and satisfaction. Friends provide support, companionship, and acceptance,

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conditions that are crucial to most older adults' sense of self-esteem and self-worth. Friendships provide opportunities to trust, confide, and share mutually enjoyed activities. They also seem to protect against stress, physical and mental problems, and premature death. Because older men are more likely to rely on their wives for companionship, older women typically enjoy a wider circle of close friends. Older men, however, develop more other-gender friendships. On the other hand, when older women can find available men with whom to be friends, they may be hesitant to become too close. These women may worry about what others are thinking, as they do not want to appear improper or forward.

5.5 WORK AND RETIREMENT

Older adults who are still working are typically committed to their work, are productive, report high job satisfaction, and rarely change jobs. However, fewer older adults are working today than were in the 1950s. In fact, only a small portion of adults age 70 and older are in the work force. With Social Security benefits beginning as early as age 62, some companies have opted to offer early retirement incentives that permit employees to leave their positions without penalizing them before the regular retirement age. Then the companies can hire less-experienced and less-expensive employees. Other companies encourage their older workers to continue working part-time. While many older adults continue to work for pay, most retire between the ages of 65 and 70.

Retirement is a major transition of late adulthood. The retired person must eventually accept a more leisurely life, whether desired or not. He or she must also continue to live in a worker's world, in which retirees are viewed as spent or devalued. Indeed, the psychological impact of retirement on older adults can be significant. Many must contend with feelings of depression, uselessness, and low self-esteem.

People who are in good health, are better educated, have few or no financial worries, have adequate family and social networks, and are satisfied with life usually look forward to retirement. Retirees may choose to spend their free time volunteering for charities, traveling, taking classes, or engaging in hobbies. The least satisfied retirees are those who never planned for retirement, have limited income, have few or no extracurricular activities, and who stay home day after day with nothing substantial to occupy their time.

5.6 LIVING ARRANGEMENTS FOR THE ELDERLY

Factors that determine living arrangements over the course of late life are diverse and complex. Living arrangements have important implications for an older adult's emotional, financial, and physical health, and historical changes in elderly living arrangements, the range of housing options available, and factors that predict living arrangements all have consequences for the well-being of older adults.

Historical perspective

Over the course of the twentieth century, living arrangements changed dramatically for older adults. In the early 1900s, the majority of older adults lived with one of their adult children. In 1910, only 12 percent of widows age sixty-five or older lived alone. Following World War II, there was a dramatic increase in the percentage of elderly people living

alone. In the 1990s, most older adults either lived with their spouses or, if not married, alone.

Today, the majority of males age sixty-five and over live with a spouse (72 percent) while 20 percent live alone or with nonrelatives. Only a small proportion of older men live with other relatives (8 percent). On the other hand, most women age sixty-five and over tend to live alone or with nonrelatives (43 percent), and another 40 percent live with a spouse. A small percentage of older women (17 percent) live with other relatives.

Types of living arrangements

Various housing choices are available for independent, semi-independent, and dependent older adults. These categories provide rough approximations of the ability of housing types to support older persons with differing functional abilities.

Housing choices for independent older persons. In the United States, most independent older persons with few or no problems related to self-care, activities of daily living (ADLs), or instrumental activities of daily living (IADLs) reside in conventional homes or apartments. Those who choose this living arrangement tend to be younger, married, have a spouse present, have children living in the home or nearby, and own their own home.

Over three-quarters (77 percent) of older adults in the United States own their own homes. While rates of home ownership decrease with advancing age, 67 percent of older adults over age eighty-five still own their own homes. Nationally, more than 5 million elderly households rent their housing. In comparison to owners, renters tend to have lower incomes and to be women or minorities who live alone.

In government-subsidized housing, the federal government provides housing for low-income older persons by financing housing for the elderly and providing rent subsidies. Approximately 1.7 million older persons live in federally subsidized housing nationwide. The largest program serving low-income older persons is public housing, in which approximately 500,000 elderlies reside, primarily in special housing for the elderly. Another program benefiting older adults is Section 202 housing, which has provided funds for non-profit sponsors to develop about 325,000 units in which over 387,000 tenants live (as of 2001).

Accessory apartments, created within single-family homes, are complete living units, including a private kitchen and bath. Elder cottage housing opportunities (ECHO) provide private housing arrangements adjacent to single-family housing. These two options can encourage economic and personal support between households, while at the same time allowing privacy. The number of older adults living in these types of housing is unknown, but is generally considered small. The growth of these options has been very slow, partly due to consumer reluctance, the physical difficulty of placing units in areas such as inner cities and inner suburbs, and restrictive zoning codes.

Retirement communities are designed for persons sixty years of age or older and provide a variety of social and recreational opportunities. While retirement communities exist in Australia, Japan, and Europe, they are more prevalent in the United States (Liebig). These communities target independent older adults and generally provide a minimum

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of supportive services. It is estimated that 7 percent of seniors in the United States live in this type of housing. These communities tend to be concentrated in metropolitan areas and in the southeast and western regions of the United States. The likelihood of moving to these types of communities decreases if there is an adult child available who lives less than an hour away. One study found that healthy, non-Hispanic white individuals tend to favor this living arrangement.

Another study, however, found that older adults with moderate disability are also attracted to retirement communities. The probability of moving to a retirement community increases as one's degree of difficulty performing IADLs (meal preparation, shopping, using the telephone, managing money, doing housework) changes from mild to moderate, but declines as such disabilities become severe. Although services are not provided by these communities, older adults may view this move as an opportunity to live among other older adults who can provide informal support. Silverstein and Zablotsky suggest that one move can serve two different needs: the desire for amenities and the need for support with daily tasks.

Housing for semi-independent older persons

Various housing options exist for semi-independent older adults who require some assistance with daily tasks. These options, which provide a supportive setting linked with services, can take place either in the home or in housing built for the expressed purpose of providing services.

Aging in place. Since most older adults prefer to remain in their own homes despite increasing frailty, bringing services into the home is an option for semi-independent older adults. Home care describes a situation in which an older person receives help in his or her home from an organization or another individual who is not a family member. As of March 2000, there were about 20,000 home care providers serving approximately 8 million individuals of all ages nationwide.

Persons preferring home care tend to have difficulties with ADLs or IADLs. This arrangement tends to be favored by persons who are divorced, separated, or widowed. The presence of children nearby decreases the likelihood of choosing home care.

A second option for receiving assistance within the home is shared housing, an arrangement in which two or more unrelated people share a house or apartment. Each person usually has his or her own sleeping quarters, with the rest of the house being shared. Members of the household can benefit from the potential for mutual assistance with chores and tasks. Surveys suggest that 2.5 percent of older adult households have at least one nonrelative living in their home, and almost 20 percent of older adults would consider living with someone they did not know. This living situation may occur naturally when individuals decide to form a household, through matches facilitated by an agency, or in small group-type homes operated by non-profit or private organizations. Older adults who have difficulties with activities of daily living, instrumental activities of daily living, and those without children living nearby tend to favor a shared arrangement. Divorced, separated, widowed, and persons who have never married are more likely to live in

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shared housing than married persons. Minorities, especially blacks and Asians, are also more likely to choose this arrangement.

Supportive housing. Frail older persons are likely to need a more physically supportive dwelling unit, greater supervision (e.g., with medications), more services, or more companionship than can be efficiently provided in conventional homes or apartments. While these options require older adults to relocate, they can offer the benefits of a built environment that is physically supportive and linked with services. These housing types tend to attract older adults and those who do not have children living nearby. Persons with difficulties climbing stairs are also more likely to select supportive housing. Supportive housing options include congregate housing, board and care homes, assisted living, and continuing care retirement communities.

Congregate housing refers to a wide range of multi-unit living arrangements for older persons in both the private and public sector. Older persons who live in this type of housing generally have their own apartments that include kitchens or kitchenettes and private bathrooms. Most of this housing has dining rooms and provides residents with at least one meal a day, which is frequently included in the rent. The housing also has common spaces for social and educational activities and, in some cases, provides transportation. Congregate housing generally does not offer personal-care services or health services, and therefore attracts older persons who can live independently. It especially appeals to older persons who no longer want the responsibility of home maintenance and meal preparation, and who positively anticipate making new friends and engaging in activities.

Board and care homes are residential facilities that generally offer on-site management, supervision, a physically accessible environment, meals, and a range of services for physically or mentally vulnerable older people, as well as younger disabled people who experienced difficulties living independently in their previous residences. In facilities that primarily serve seniors, the average age of older persons in these settings is approximately eighty-three, about eight years older than residents of government-assisted housing. Studies suggest that over 30,000 board and care homes exist in the United States, more than double the number of nursing homes. However, owing to their smaller size (usually between 5 and 20 dwelling units), board and care facilities house only about 400,000 residents (one-fourth the number of residents in nursing homes) and include about 200,000 persons under age sixty-two.

Assisted living is a housing option prevalent in the U.S. and northern Europe (Regner and Scott) that involves the delivery of professionally managed supportive services and, depending on state regulations, nursing services in a group setting that is residential in character and appearance. During the 1990s, assisted living was the fastest growing segment of the senior housing market. It has the capacity to meet unscheduled needs for assistance and is managed in ways that aim to maximize the physical and psychological independence of residents.

In 1999, there were approximately 30,000 to 40,000 assisted-living facilities in the United States, housing approximately one million individuals. A variety of services can be provided, including meals, housekeeping, transportation, medication management,

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laundry services, and recreation activities. Assisted living is intended to accommodate physically and mentally frail elderly people without imposing on them a heavily regulated, institutional environment. For many residents, assisted living has served as an alternative to nursing homes. Also referred to as life care communities, continuing care retirement communities (CCRCs) are unique in that they offer various levels of care within one community to accommodate residents who have changing needs. Most CCRCs offer independent living areas, assisted living, and skilled nursing care. A variety of services are offered, including transportation, meals, housekeeping, and physician services. While some communities provide most of their own services, others obtain many of them through contracts with outside organizations.

By 1992, there were approximately 1,000 CCRCs in the United States, housing approximately 350,000 to 450,000 older persons. Each community houses between 400 and 600 older persons, often in campus-type settings. CCRCs generally require, as a condition for entry, that new residents be in reasonably good health. The growth of housing types for semi-independent older adults provides increasing options for older adults who face increasing frailty in later life. In addition, home-care agencies, which provide needed assistance with household tasks and personal-care needs coupled with environmental modifications, can enable older adults to remain in their own homes.

Dependent older adults

Nursing homes provide an option for older adults whose functional limitations and chronic needs are severe. These facilities provide skilled nursing care and rehabilitation services to the elderly as well as younger individuals who are disabled or mentally ill. These are generally stand-alone facilities, but some are operated within a hospital or retirement community. There were approximately 1.56 million nursing home residents in the United States in 1996. Those living in nursing homes tend to be women (72 percent), over age eighty-five (49 percent), white (89 percent), and widowed (60 percent). A vast majority of residents receive help with three or more ADLs, such as bathing, dressing, toileting, transfers, feeding, and mobility. The majority of residents also tend to have some form of memory loss (71 percent). The most frequently occurring health conditions for nursing home residents over age sixty-five are dementia (51 percent), heart disease (48 percent), and hypertension (40 percent).

Relocation effects

There has long been concern that relocation to a nursing home may adversely affect physical and mental health due to the disruption of daily routines and connections to family and friends. Recent research has demonstrated higher mortality rates among those who have recently relocated to a nursing home, compared with persons remaining at home. This problem has been labeled relocation stress syndrome, defined as physiological or psychosocial reactions resulting from transfer from one environment to another. Symptoms include anxiety, apprehension, confusion, depression, and loneliness. Acceptance to institutionalization generally begins within six to eight weeks, and adjustment is usually complete within three to six months.

It could be argued that it is not the relocation itself that leads to a greater likelihood of mortality, but the admission of largely high-risk persons who are already near death. However, one study found that those institutionalized for reasons other than poor health also experienced an increase in mortality immediately following admission to a nursing home (Acehnese et al., 2000), suggesting that there are factors inherent in the relocation itself that elevate the postadmission mortality rate.

There is a range of housing types available to older adults, and the factors that influence moves seem complex. Most research has focused on predictors of relocation to different geographical areas (to be closer to or with family members), or to institutions. Future research needs to explore predictors of relocation into specific housing types, such as assisted living or CCRCs. The rapid growth of the older adult population necessitates an understanding of determinants of living arrangements and its implications for the elderly.

5.7 DEATH: FACING DEATH & THREE ASPECTS OF DEATH

PALLIATIVE CARE

Palliative care is an interdisciplinary approach to specialized medical and nursing care for people with life-limiting illnesses. It focuses on providing relief from the symptoms, pain, physical stress, and mental stress at any stage of illness, with a goal of improving the quality of life for both the person and their family. Doctors who specialize in palliative care have had training tailored to helping patients and their family members cope with the reality of the impending death and make plans for what will happen after.

Palliative care is provided by a team of physicians, nurses, physiotherapists, occupational therapists, speech-language pathologists, and other health professionals who work together with the primary care physician and referred specialists or other hospital or hospice staff to provide additional support to the patient. It is appropriate at any age and at any stage in a serious illness and can be provided as the main goal of care or along with curative treatment. Although it is an important part of end-of-life care, it is not limited to that stage. Palliative care can be provided across multiple settings including in hospitals, at home, as part of community palliative care programs, and in skilled nursing facilities. Interdisciplinary palliative care teams work with people and their families to clarify goals of care and provide symptom management, psychosocial, and spiritual support.

HOSPICE

In many other countries, no distinction is made between palliative care and hospice, but in the United States, the terms have different meanings and usages. They both share similar goals of providing symptom relief and pain management, but hospice care is a type of care involving palliation without curative intent. Usually, it is used for people with no further options for curing their disease or people who have decided not to pursue further options that are arduous, likely to cause more symptoms, and not likely to succeed. The biggest difference between hospice and palliative care is the type of illness people have, where they are in their illness especially related to prognosis, and their goals/wishes regarding curative treatment. Hospice care under the Medicare Hospice Benefit requires that two physicians certify that a person has less than six months to live if the disease follows its

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usual course. This does not mean, though, that if a person is still living after six months in hospice he or she will be discharged from the service.

Hospice care involves caring for dying patients by helping them be as free from pain as possible, providing them with assistance to complete wills and other arrangements for their survivors, giving them social support through the psychological stages of loss, and helping family members cope with the dying process, grief, and bereavement. It focuses on five topics: communication, collaboration, compassionate caring, comfort, and cultural (spiritual) care. Most hospice care does not include medical treatment of disease or resuscitation although some programs administer curative care as well. The patient is allowed to go through the dying process without invasive treatments. Family members who have agreed to put their loved one on hospice may become anxious when the patient begins to experience death. They may believe that feeding or breathing tubes will sustain life and want to change their decision. Hospice workers try to inform the family of what to expect and reassure them that much of what they see is a normal part of the dying process.

The History of Hospice

Dame Cicely Saunders was a British registered nurse whose chronic health problem had forced her to pursue a career in medical social work. The relationship she developed with a dying Polish refugee helped solidify her ideas that terminally ill patients needed compassionate care to help address their fears and concerns as well as palliative comfort for physical symptoms. After the refugee's death, Saunders began volunteering at St Luke's Home for the Dying Poor, where a physician told her that she could best influence the treatment of the terminally ill as a physician. Saunders entered medical school while continuing her volunteer work at St. Joseph's. When she achieved her degree in 1957, she took a position there.

Saunders emphasized focusing on the patient rather than the disease and introduced the notion of 'total pain', which included psychological, spiritual, emotional, intellectual, and interpersonal aspects of pain, the physical aspects, and even financial and bureaucratic aspects. This focus on the broad effects of death on dying individuals and their families has provided the foundation for modern-day practices related to hospice care services.[2] Saunders experimented with a wide range of opioids for controlling physical pain but also considered the needs of the patient's family.

Saunders disseminated her philosophy internationally in a series of tours of the United States that began in 1963. In 1967, Saunders opened St. Christopher's Hospice. Florence Wald, the Dean of Yale School of Nursing who had heard Saunders speak in America, spent a month working with Saunders there in 1969 before bringing the principles of modern hospice care back to the United States, establishing Hospice, Inc. in 1971. Another early hospice program in the United States, Alive Hospice, was founded in Nashville, Tennessee on November 14, 1975. By 1977 the National Hospice Organization had been formed.

Hospice Care in Practice

The early established hospices were independently operated and dedicated to giving patients as much control over their own death process as possible. Today, it is estimated

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that over 40 million individuals require palliative care, with over 78% of them being of low-income status or living in low-income countries. It is also estimated, however, that less than 14% of these individuals receive it. This gap is created by restrictive regulatory laws regarding controlled substance medications for pain management, as well as a general lack of adequate training in regards to palliative care within the health professional community. Although hospice care has become more widespread, these new programs are subjected to more rigorous insurance guidelines that dictate the types and amounts of medications used, length of stay, and types of patients who are eligible to receive hospice care. Thus, more patients are being served, but providers have less control over the services they provide, and lengths of stay are more limited. Patients receive palliative care in hospitals and in their homes.

The majority of patients on hospice are cancer patients and they typically do not enter hospice until the last few weeks prior to death. The average length of stay is less than 30 days and many patients are on hospice for less than a week. Medications are rubbed into the skin or given in drop form under the tongue to relieve the discomfort of swallowing pills or receiving injections. A hospice care team includes a chaplain as well as nurses and grief counselors to assist spiritual needs in addition to physical ones. When hospice is administered at home, family members may also be part, and sometimes the biggest part, of the care team. Certainly, being in familiar surroundings is preferable to dying in an unfamiliar place. But about 60 to 70 percent of people die in hospitals and another 16 percent die in institutions such as nursing homes. Most hospice programs serve people over 65; few programs are available for terminally ill children.

Hospice care focuses on alleviating physical pain and providing spiritual guidance. Those suffering from Alzheimer's also experience intellectual pain and frustration as they lose their ability to remember and recognize others. Depression, anger, and frustration are elements of emotional pain, and family members can have tensions that a social worker or clergy member may be able to help resolve. Many patients are concerned with the financial burden their care will create for family members. And bureaucratic pain is also suffered while trying to submit bills and get information about health care benefits or to complete requirements for other legal matters. All of these concerns can be addressed by hospice care teams.

The Hospice Foundation of America notes that not all racial and ethnic groups feel the same way about hospice care. Certain groups may believe that medical treatment should be pursued on behalf of an ill relative as long as possible and that only God can decide when a person dies. Others may feel very uncomfortable discussing issues of death or being near the deceased family member's body. The view that hospice care should always be used is not held by everyone and health care providers need to be sensitive to the wishes and beliefs of those they serve. Similarly, the population of individuals using hospice services is not divided evenly by race. Approximately 81% of hospice patients are White, while 8.7% are African American, 8.7% are multiracial, 1.9% are Pacific Islander, and only 0.2% are Native American.

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EUTHANASIA AND PHYSICIAN-ASSISTED SUICIDE

Euthanasia or helping a person fulfill their wish to die, can happen in two ways: voluntary euthanasia and physician-assisted suicide. Voluntary euthanasia refers to helping someone fulfill their wish to die by acting in such a way to help that person's life end. This can be passive euthanasia such as no longer feeding someone or giving them food. Or it can be active euthanasia such as administering a lethal dose of medication to someone who wishes to die. In some cases, a dying individual who is in pain or constant discomfort will ask this of a friend or family member, as a way to speed up what he or she has already accepted as being inevitable. This can have lasting effects on the individual or individuals asked to help, including but not limited to prolonged guilt.

Physician-Assisted Suicide: Physician-assisted suicide occurs when a physician prescribes the means by which a person can end his or her own life. This differs from euthanasia; in that it is mandated by a set of laws and is backed by legal authority. Physician-assisted suicide is legal in the District of Columbia and several states, including Oregon, Hawaii, Vermont, and Washington. It is also legal in the Netherlands, Switzerland, and Belgium.

The specific laws that govern the practice of physician-assisted suicide vary between states. Oregon, Vermont, and Washington, for example, require the prescription to come from either a Doctor of Medicine (M.D.) or a Doctor of Osteopathy (D.O.). These state laws also include a clause about the designated medical practitioner being willing to participate in this act. In Colorado, terminally ill individuals have the option to request and self-administer life-ending medication if their medical prognosis gives them six months or less to live. In the District of Columbia and Hawaii, the individual is required to make two requests within predefined periods of time and also complete a waiting period, and in some cases undergo additional evaluations before the medication can be provided.

A growing number of the population support physician-assisted suicide. In 2000, a ruling of the U.S. Supreme Court upheld the right of states to determine their laws on physician-assisted suicide despite efforts to limit physicians' ability to prescribe barbiturates and opiates for their patients requesting the means to end their lives. The position of the Supreme Court is that the debate concerning the morals and ethics surrounding the right to die is one that should be continued. As an increasing number of the population enters late adulthood, the emphasis on giving patients an active voice in determining certain aspects of their own death is likely.

Physician-Assisted Suicide

In a recent example of physician-assisted death, David Goodall, a 104-year-old professor, ended his life by choice in a Swiss clinic in May 2018. Having spent his life in Australia, Goodall traveled to Switzerland to do this, as the laws in his country do not allow for it. Swiss legislation does not openly permit physician-assisted suicide, but it does not forbid an individual with "commendable motives" from assisting another person in taking his or her own life. Watch this video of a news conference with Goodall "104-year-old Australian Promotes Right to Assisted Suicide" that took place the day before he ended his life with physician-assisted suicide.

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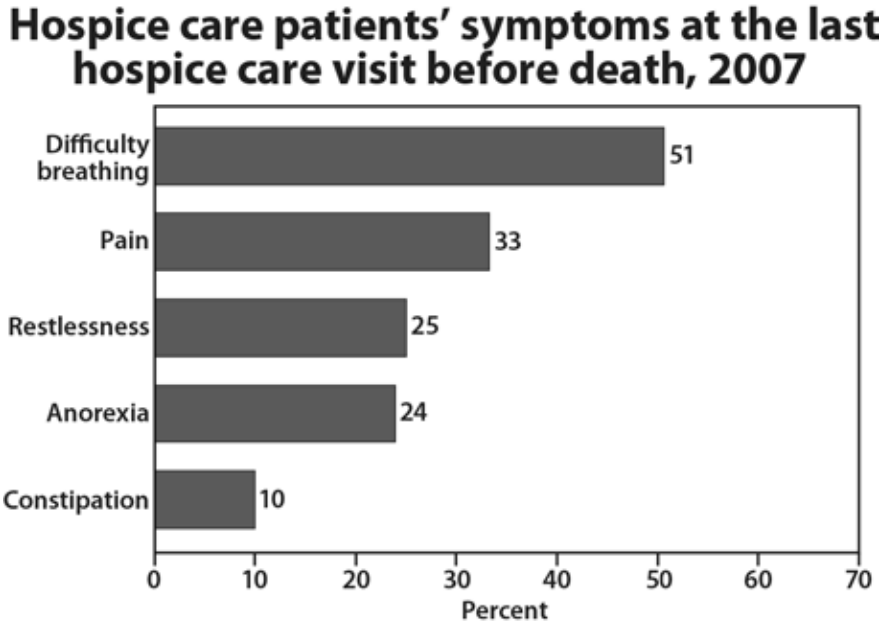
ASPECTS OF DEATH

One way to understand death and dying is to look more closely at physical death, psychological death, and social death. These deaths do not occur simultaneously. Rather, a person's physiological, social, and psychic death can occur at different times (Pattison, 1977).

Physiological death occurs when the vital organs no longer function. The digestive and respiratory systems begin to shut down during the gradual process of dying. A dying person no longer wants to eat as digestion slows and the digestive track loses moisture and chewing, swallowing, and elimination become painful processes. Circulation slows and mottling or the pooling of blood may be noticeable on the underside of the body appearing much like bruising. Breathing becomes more sporadic and shallower and may make a rattling sound as air travels through mucus filled passageways. The person often sleeps more and more and may talk less although continues to hear. The kinds of symptoms noted prior to death in patients under hospice care (care focused on helping patients die as comfortably as possible) is noted below.



When a person no longer has brain activity, they are clinically dead. Physiological death may take 72 or fewer hours.

Social death begins much earlier than physiological death. Social death occurs when others begin to withdraw from someone who is terminally ill or has been diagnosed with a terminal illness. Those diagnosed with conditions such as AIDS or cancer may find that friends, family members, and even health care professionals begin to say less and visit less frequently. Meaningful discussions may be replaced with comments about the weather or other topics of light conversation. Doctors may spend less time with patients after their prognosis becomes poor. Why do others begin to withdraw? Friends and family members may feel that they do not know what to say or that they can offer no solutions to relieve suffering. They withdraw to protect themselves against feeling inadequate or

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from having to face the reality of death. Health professionals, trained to heal, may also feel inadequate and uncomfortable facing decline and death. A patient who is dying may be referred to as "circling the drain" meaning that they are approaching death. People in nursing homes may live as socially dead for years with no one visiting or calling. Social support is important for quality of life and those who experience social death are deprived from the benefits that come from loving interaction with others.

Psychic death occurs when the dying person begins to accept death and to withdraw from others and regress into the self. This can take place long before physiological death (or even social death if others are still supporting and visiting the dying person) and can even bring physiological death closer. People have some control over the timing of their death and can hold on until after important occasions or die quickly after having lost someone important to them. They can give up their will to live.

5.8 CHAPTER SUMMARY

It is well known that as a society we are living much longer thanks to improved living conditions and health care. While being able to reach old age is something to be thankful for, in many ways, there are several challenges facing the elderly, which we all need to pay more attention to. Often it is not until we start to age ourselves or we see a loved one struggling that we sit up and take notice, but as a society, we can do more to make life easier for our aging population. This article outlines the biggest challenges that elderly people face today and how we can support them and enable them to age with dignity. Sometimes this care can be provided by family members, but this can place a lot of strain on the caregiver in terms of balancing this with work and other family responsibilities. These caregivers need to be given the training, resources, and emotional support necessary to help them deliver the best care for their loved ones and themselves. One of the most common causes of loneliness in old age is loss of a spouse. While many elderly people acknowledge the possibility of the death of a spouse and make plans for it, relatively few realize the problems involved and are prepared to meet them or to adjust to the loneliness that it brings. The elderly widow seems psychologically prepared to accept the death of the spouse through death rehearsal and lessening of social pressures, and she adjusts by maintaining a high rate of social activities. Older adult marriages and families are sometimes referred to as retirement marriages or retirement families. In such families, the following demographics are typical: The average age of the wife is 68, and the husband, is 71; they have been married for over 40 years and report high levels of marital satisfaction; they have three grown children, the oldest being about 40; and 20 percent of the husbands and 4 percent of the wives continue to work, even though they consider themselves retired. The majority of older Americans—some 80 to 90 percent—have grown children, and enjoy frequent contact with them. Contrary to popular misconceptions, while the elderly enjoys these contacts, they do not want to live with their grown children. Instead, they want to live in their own homes and remain independent for as long as possible.

Factors that determine living arrangements over the course of late life are diverse and complex. Living arrangements have important implications for an older adult's

emotional, financial, and physical health, and historical changes in elderly living arrangements, the range of housing options available, and factors that predict living arrangements all have consequences for the well-being of older adults. Accessory apartments, created within single-family homes, are complete living units, including a private kitchen and bath. Elder cottage housing opportunities (ECHO) provide private housing arrangements adjacent to single-family housing. Palliative care is an interdisciplinary approach to specialized medical and nursing care for people with life-limiting illnesses. It focuses on providing relief from the symptoms, pain, physical stress, and mental stress at any stage of illness, with a goal of improving the quality of life for both the person and their family. In many other countries, no distinction is made between palliative care and hospice, but in the United States, the terms have different meanings and usages. They both share similar goals of providing symptom relief and pain management, but hospice care is a type of care involving palliation without curative intent. Euthanasia or helping a person fulfill their wish to die, can happen in two ways: voluntary euthanasia and physician-assisted suicide. Psychic death occurs when the dying person begins to accept death and to withdraw from others and regress into the self. This can take place long before physiological death (or even social death if others are still supporting and visiting the dying person) and can even bring physiological death closer.

5.9 REVIEW QUESTIONS

SHORT ANSWER TYPE QUESTIONS

1. **Explain financial insecurity in old age.**
2. **What is the difficulty with everyday tasks and mobility in old age?**
3. **Explain end-of-life preparations of old age.**
4. **Explain late adulthood and sexuality of old age.**
5. **What kind of relationships with grandchildren in old age?**

LONG ANSWER TYPE QUESTIONS

1. **Briefly explain euthanasia and physician-assisted suicide.**
2. **Elaborate the three aspects of death.**
3. **Explain each type of living arrangements in old age.**
4. **Write a brief note on hospice.**
5. **Enlist and explain the vocational and family hazards of old age.**

5.10 MULTIPLE CHOICE QUESTIONS

1. **Which theory argue that the mechanical functions of the body wear out with age. Some sub-theories say that the body's constant manufacture of energy to fuel its activities creates by-products, which eventually reach such high levels that they impair the body's normal functioning.**
   a. Peripheral Slowing Hypothesis
   b. Wear-and-Tear Theories of Aging

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c. Generalized Slowing Hypothesis
d. Genetic Preprograming Theories of Aging

2. _____ itself that leads to a greater likelihood of mortality, but the admission of largely high-risk persons who are already near death.
a. Aging in place
b. Supportive housing
c. Dependent older adults
d. Relocation

3. _____ care is an interdisciplinary approach to specialized medical and nursing care for people with life-limiting illnesses.
a. Palliative
b. Hospice
c. Euthanasia
d. None of the above

4. _____ care involves caring for dying patients by helping them be as free from pain as possible, providing them with assistance to complete wills and other arrangements for their survivors, giving them social support through the psychological stages of loss, and helping family members cope with the dying process, grief, and bereavement.
a. Palliative
b. Hospice
c. Euthanasia
d. None of the above

5. Euthanasia or helping a person fulfill their wish to die, can happen in two ways: voluntary euthanasia and _____.
a. Physiological death
b. Social death
c. Physician-Assisted Suicide
d. Psychic death

6. _____ physician-assisted suicide occurs when a physician prescribes the means by which a person can end his or her own life.
a. Physician-Assisted Suicide
b. Physiological death
c. Social death
d. Psychic death

7. _____ occurs when the vital organs no longer function. The digestive and respiratory systems begin to shut down during the gradual process of dying.
a. Physician-Assisted Suicide
b. Physiological death
c. Social death
d. Psychic death

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8. _____ begins much earlier than physiological death. Social death occurs when others begin to withdraw from someone who is terminally ill or has been diagnosed with a terminal illness.

a. Physician-Assisted Suicide
b. Physiological death
c. Social death
d. Psychic death

9. _____ occurs when the dying person begins to accept death and to withdraw from others and regress into the self.

a. Physician-Assisted Suicide
b. Physiological death
c. Social death
d. Psychic death

10. _____ or helping a person fulfill their wish to die.

a. Euthanasia
b. Physiological death
c. Social death
d. Psychic death

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ANSWER KRY

UNIT I

QUESTION	ANSWER	QUESTION	ANSWER
1.	b	6.	c
2.	a	7.	a
3.	d	8.	a
4.	b	9.	c
5.	a	10.	d

UNIT II

QUESTION	ANSWER	QUESTION	ANSWER
1.	a	6.	c
2.	b	7.	a
3.	c	8.	b
4.	d	9.	b
5.	b	10.	d

UNIT III

QUESTION	ANSWER	QUESTION	ANSWER
1.	a	6.	a
2.	c	7.	b
3.	d	8.	c
4.	b	9.	b
5.	c	10.	d

UNIT IV

QUESTION	ANSWER	QUESTION	ANSWER
1.	a	6.	d
2.	a	7.	c
3.	c	8.	a
4.	b	9.	c
5.	a	10.	d

UNIT V

QUESTION	ANSWER	QUESTION	ANSWER
1.	b	6.	a
2.	d	7.	b
3.	a	8.	c
4.	b	9.	d
5.	c	10.	a

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Developmental Psychology II

Book References

- Amborn S.R. (1975) Child Development. Rinehart Press/Holt, Rinehart and Winston, San Francisco
- Baltes, P. B., Reese, H. and Lipsett, L. (1980) 'Lifespan developmental psychology', Annual Review of Pyschology 31: 65 - 110.
- Boyd, D. and Bee, H. (2006). Lifespan Development (4th ed.). Upper Saddle River, NJ: Pearson.
- Hurlock, Elizabeth B. (1980) Developmental Psychology: A Life-Span Approach, Mc Graw Hill company.
- Hurlock, E. B. (1980). Developmental Psychology (5th edition) Tata McGraw- Hill Publishing Company Ltd.
- Mussen, P. H, Conger, J.J & et.al (1984) Child Development and Personality (6th edition) Harper & Row, Publishers, New York
- Rutter, M. and Rutter, M. (1992) Developing Minds. Challenge and continuityacross the life span, London: Penguin. Some portion has taken been from Mamta Sharma (B.A. course 2, block 1, unit 1.) and Varsha Godbole (B.A. course 9, group I, block 2, unit 1), IGNOU course materials (2010) New Delhi.
- Bargh, J. A., &Morsella, E. (2008). The unconscious mind. Perspectives on Psychological Science, 3, 73–79.
- Boden, J., & Baumeister, R. (1997). Repressive coping: Distraction using pleasant thoughts and memories. Journal of Personality and Social Psychology, 73, 45-62. doi:10.1037/0022-3514.73.1.45
- Braam, A. W., Bramsen, I., van Tilburg, T. G., van der Ploeg, H. M., &Deeg,
- D. J. H. (2006). Cosmic transcendence and framework of meaning in life: Patterns among older adults in the Netherlands. Journal of Gerontology, 61B(3), S121-S128.
- Branje, S., & Koper, N. (2018). Psychosocial development. In M. Bornstein (Ed.), The SAGE encyclopedia of lifespan human development (pp. 1772- 1774). SAGE Publications, Inc., https://www.doi.org/10.4135/9781506307633.n661
- Dalby, P. (2006). Is there a process of spiritual change or development associated with aging? A critical review of research. Aging & Mental Health, 10(1), 4-12.
- Erikson, E. (1978). Adulthood. New York: Norton.
- Erikson, J. M. (1997). The life cycle completed: Extended version with new chapters on the ninth stage of development. New York: W. W. Norton & Company, Inc.
- Fisher, S., & Greenberg, R. P. (1996). Freud scientifically reappraised: Testing the theories and therapy. John Wiley & Sons.
- Fonagy, P., & Target, M. (2000). The place of psychodynamic theory in developmental psychopathology. Development and Psychopathology, 12, 407–425.

- Havighurst, R. J. (1948) Developmental tasks and education. Chicago, IL: University of Chicago Press.
- Havighurst, R. J. (1953) Human development and education.New York, NY: Longmans, Greens