

Providing Age-Related Care Across the Lifespan



A self-directed learning module created for the Nursing Education Department at MemorialCare Orange Coast Medical Center. This module is designed to support the clinical student in providing appropriate care interventions for patients from childhood through late adulthood.

Read this information then complete the associated quiz. Submit the completed quiz with your clinical rotation information.

The Infant and Young Child (Birth to 3 years)

Development Tasks of Young Children (birth to 3 years)

Erikson's theory of psychosocial development teaches that the child from birth to one year is experiencing Trust vs. Mistrust. The goal of this period of social development is to develop trust security and a sense of optimism. This is accomplished through the development of relationship with consistent, loving caregivers.

The one to three years old is learning Autonomy vs. Shame and Doubt. At this time the child has a need to develop some control over his own experiences. Resistance is seen when the feels out of control. This can be an area of difficulty during hospitalization.



The Neonate (Birth to 30 days)

Physical Development

During this period of life, regulation of the baby's body system occurs. Body temperature regulation, feeding and digestion, and sleeping patterns become established. However, the neonate is in a state of total dependence on his caregivers. Though he can begin to focus on close by objects, such as a face, vision remains limited. During this first month, he gains some head and neck motor control. Birth reflexes, such as the startle reflex, can be seen as protective responses during the first weeks of life. Neonates must be observed for other reflexes such as grasping and the gag reflexes. Also, steady weight gain indicates adequate feeding. Age specific vital signs are also monitored during visits to healthcare providers.

Cognitive development

The infant is in the stage recognized by Piaget as the Reflexive Stage. Simple reflex activity such as grasping and sucking are present.

The Infant (to 1 year)

Physical Development

Infants are experiencing rapid growth and physical development. They use the skills of touching, tasting, looking, listening and smelling to explore and better understand their world. Brain and neurological growth continue to allow the child to progress from turning over to sitting to crawling. Children begin to develop effective means of communication that progresses from crying to babbling in preparation for spoken language.

Cognitive Development

The child progresses from stages of reflexive behavior to purposeful behavior through experiences. Actions become intentional as the first year progresses.

Toddlers (1 to 3 years)

Physical Development

During this period, developmental milestones vary with each individual child. For example, some children may walk by the first birthday while others may wait months later. However, the skills acquired during this time include tremendous growth in both fine and gross motor movement and significant communication skills.

Between one and three years old, children will progress from standing unassisted to walking and running. By the end of the second year, children can typically kick and throw a ball. By three years of age most children can begin to dress and undress themselves, use a pedal tricycle and walk up and down stairs by alternating feet.

Fine motor skill development allows the child to stack two blocks by about fourteen months old. The fine motor skills progress to allow the child to use a spoon or fork to feed himself.



Cognitive Development

Language development is significant during this period. Children begin to point to items that they want and communicate affection, pleasure and excitement. At two years of age, the average toddler speaks about 50 words and can be understood half the time when speaking. Three-year-olds can follow a two- or three-part command and communicate with four or five work sentences. By this time, the child is interested in “pretend” play, socializes well with others and is often ready to begin toilet training.

Mortality Risks for This Age Group

<p><u>Under 1 year of age</u></p> <ol style="list-style-type: none"> 1. Congenital anomalies 2. Disorders related to prematurity or low birth weight 3. Sudden Infant Death Syndrome 4. Effects of maternal complications of pregnancy 	<p>Considerations for Healthcare Providers</p> <ol style="list-style-type: none"> 1. Encourage prenatal monitoring during pregnancy. 2. Promote parents ongoing participation with healthcare team to manage any complications. 3. Encourage parents on placing infants on their backs for sleeping. 4. Promote parents ongoing participation with healthcare team to manage any complications.
<p><u>Age 1 – 3 years</u></p> <ol style="list-style-type: none"> 1. Unintentional injuries 2. Complications of Congenital anomalies 3. Malignant neoplasm 4. Diseases of the heart 	<ol style="list-style-type: none"> 1. Encourage use of child restraint seats in motor vehicles, as well as home monitoring for safety risks such as pools and stairs. 2. Promote parents ongoing participation with healthcare team to manage any complications. Encourage routine health screening for early detection. 3. Encourage routine health screening for early detection.

Responses to Illness and Hospitalization

Hospitalization creates a stressful situation for both the child and the parent. This child who is in a developmental stage that drives independence and autonomy is placed in an environment that often takes away much self-control. The child may experience fear and anxiety while at the same time trying to cope with physical complaints such as pain or nausea. The stress of the parents can be identified by the young child, encouraging a feeling of helplessness. It is important to address the emotional needs of both the child and his family to develop trust in the healthcare team. This includes consideration of cultural differences in care expectations.

Normal Vital Signs

Age	Pulse/ bmp	Respiratory Rate/min	Blood Pressure
Infants	I>12 mos. +100-120	Neonate = 40-60 Infant 25-50	Systolic of 72 – 104 Diastolic 37 – 56
Child 1 – 3 years	80 - 100	15 - 30	Systolic of 86 – 106 Diastolic 42 – 63

Developmental Approaches to Care

Intervention	Rationale
<p><i>Infants – Birth to One Year</i></p> <ol style="list-style-type: none"> 1. Allow parents to remain with the infant as much as possible. 2. Involve the parents in procedures, education and training of procedures. 3. Provide protective environment, ensure infant warmth due to immature heat regulation. 4. Limit number of strangers. 5. Use distraction (such as pacifier or bottle). 6. Evaluate environment for possible safety risks. 7. Encourage parents to keep immunizations up to date. 8. Provide age appropriate toys. 	<p>Participation of the family supports the child’s drive to establish trust.</p> <p>Environmental safety checks decrease likelihood of occurrence of preventable injuries.</p>
<p><i>1 to 3 Years of Age</i></p> <ol style="list-style-type: none"> 1. Involve parents in procedure and education of procedures. 2. Listen to the child’s words, respect his or her new speech skills. 3. Allow the child to “help” with procedures such as dressing removal, etc. if age appropriate. 4. Use play approach and toys to explain expectations and encourage communication. 5. Give one direction at a time. 6. Use distraction techniques. 7. Allow a choice when possible. 8. Evaluate environment for possible safety risks. 9. Encourage parents to keep immunizations up to date. 10. Use words of encouragement and offer praise when the child is cooperative. 11. Provide age appropriate toys. 	<p>Support the child’s development of trusting relationships.</p> <p>Involving child in care allows a sense of personal control in the situation. Sense of autonomy is encouraged to minimize resistance and promote cooperation. An environment free of hazards promotes prevention of injury.</p>

Pain Considerations in Young Children

Assessment of pain in infants and toddlers offers many challenges to the healthcare professional. Infants and young toddlers do experience pain but are not able to verbally communicate what they are feeling. Assessment tools are available that can be used to assess physiological indicators such as behaviors or changes in vital signs. It is important to anticipate when a child might be experiencing pain, such as during a procedure, and provide appropriate pain relief. The family may be an important factor in interpreting the child's pain experience and assisting in determining the most effective interventions for relief.

Developmental tasks of preschool children

Erikson's theory of psychosocial development teaches that the child of this age is experiencing Initiative vs. Guilt. The child identifies personally meaningful activities and wants to participate in those activities. Care providers who allow children to pursue their own interest are promoting a positive self-esteem. The child, who is allowed to follow through with his task, feels a sense of accomplishment for having taken the initiative. If a child is not allowed to follow his own initiative, a sense of guilt is developed for having tried.

Physical Development

Growth is not as rapid as during the first three years of life. The child is developing and improving motor skills. This is seen with the child's gross motor ability to dress himself, use the toilet, go up stairs alternating feet and climb structures. Fine motor development allows the child to draw with more detail. For example, he may draw a man with two to four body parts.

Cognitive Development

During this period the child can begin to count using one-to-one association. He can tell a story, name colors, and repeat a short sentence. Social development has the child playing in groups with other children, role playing and asking questions to better understand the world around him.

Normal Vital Signs

Age	Pulse/ bmp	Respiratory Rate/min	Blood Pressure
Child 3 – 5 years	80 - 100	15 - 30	Systolic of 89 – 112 Diastolic 46 - 72

Mortality Risks for this Age Group

1. Unintentional injuries	Encourage use of child restraint seats in motor vehicles, as well as home monitoring for safety risks such as pools, stairs. During hospitalization, survey the environment for risks such as small items that the child could choke on, elevated bed height or exposed cords. Promote parents ongoing participation with healthcare team to manage any complications Encourage routine health screening for early detection.
2. Complications of Congenital anomalies	
3. Malignant neoplasm	

Responses to Illness and Hospitalization

Hospitalization creates a stressful situation for preschoolers. They want to be independent and have a good understanding of what is happening to them. The unfamiliar faces and equipment of the hospital can create fear and anxiety. The child may also be dealing with pain or other physical complaints. Additionally, when children recognize that their parents are also feeling anxiety related to the hospitalization, a feeling of insecurity can develop. Both the patient and the family need continuous emotional support throughout the length of stay. Clear communication and explanation can promote a trusting relationship with the healthcare provider.

Developmental Approaches to Care

Intervention	Rationale
<ol style="list-style-type: none"> 1. Involve the parents and child together in care decisions. 2. Involve parents in interventions when appropriate. 3. Allow the child the ability to make decisions whenever possible. Example: make food choices, choose diversional activity. 4. Use play techniques and toys to teach children about care and procedures. 5. Encourage the child's participation and allow asking questions to better understand what is happening. 6. Survey the environment for any safety issues. 7. Encourage parents to keep child's immunizations current. 8. Give praise for cooperation and encourage the child to participate. 9. Provide age appropriate toys. 	<p>The child is trying to become autonomous and understand his place in his world. Allowing participation supports this important developmental stage. The child should have developed trust in the parents and including parent participation will minimize fear and apprehension about the hospitalization.</p> <p>Injury prevention and health promotion are important care measures.</p>

Considerations for Pain Management

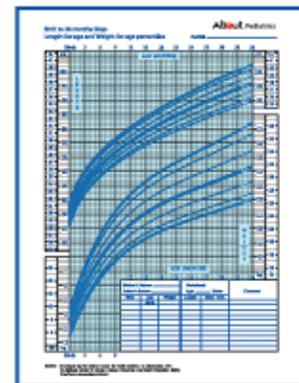
A pain assessment is completed upon admission to the hospital. This assessment includes the pain history elicited from the patient and parents. Assessment methods may be altered to meet the developmental need of the patient. Children may need simple, single topic questions. Evaluate whether the child of this age can understand and use the 0 – 10 pain rating scale. An alternative is to use the facial expression scale that allows the child to identify which facial expressions best show how he feels in relation to pain. Include the patient and family in establishing pain relieving goals. Family and cultural values will greatly influence the child's reaction to the pain experience.

The Older School-Aged Child (6-12)

Physical Development

The school age child continues to experience gains in growth, but by age 9 or 10 the growth pattern slows; unlike the rates experienced during the infant, early childhood and adolescent years. Weight and height averages for the six-year-old are 48 lbs and 46 inches tall.

By 10 to 12 years the weight averages at 70 – 100 lbs. with height averages of 55 – 60 inches. Pubescent changes may begin during this age. The younger school aged child begins the experience of eruption of the permanent teeth.



Cognitive Development (Piaget's Theory)

Stage 3: Concrete operational thought (Ages 7-12)

This stage is characterized by problem solving with concrete examples and the ability to manipulate one or two variables at a time. Problem solving is reality-oriented. As mental skills develop, they understand concepts such as birth, death and sex differences. They also develop a set of values and a sense of morality. The school aged child is able to understand cause and effect, right/wrong, perceive future and past events, reasoning and deal with several concepts in sequence.

Developmental Tasks

The child of this age experiences what Erikson described as the Industry versus Inferiority stage of development. In this stage, significant relationships include peers, family and teachers. Children work hard to be successful in what they attempt to do. Acceptance by the peer group becomes important during this age.

Social Maturation

This age group shows compassion for friends. Children spend more time away from home with classmates, other adults and friends. They try to earn approval from others by completing tasks and mastering new tools and ideas. However, respecting others who are different is sometimes a hard lesson to learn.

Address them by name or nick-name, if preferred (has an established idea regarding self image.). Children acquire beliefs, values and behaviors considered desirable by family/culture. These behaviors are also influenced by ethnicity, social class, economic status, occupation, religion, schools, peers and biculturalism. Culture determines the type of food eaten, language spoken and ideals/behaviors. Recognize, respect and understand parent's race, ethnicity, child rearing practices and attitudes toward health.

In planning and implementing patient care, attempt to adapt ethnic practices to the family's health needs. Identify language spoken at home, spiritual beliefs, and family dynamics and incorporate into care practices/resource integration. Involve parents in teaching, as appropriate.

Self-evaluation

Even as children learn new things, they often return to old behaviors. They reassert their independence, challenge adults, demand equal treatment, and have an extreme sense of fairness. They show their individuality through collections (stamps, cards, shells, stones, etc.) or other hobbies.

Skill Learning

Early school years are important for children. They learn the basic skills of reading, writing and arithmetic. They establish lifelong patterns, which can greatly influence their future.

Team Play

There are three significant characteristics of team membership that are relevant to the development of the child during this stage. First, the child learns the subordination of personal goals to group goals. Second, the child learns the principle of the division of labor. Third, the child learns about competition.

Personality and Behavior Development

According to Erikson's theory of personality development, Industry is the stage in which the school-age child develops healthy behavioral tendencies. In this stage children need and desire real achievement. This is a critical period in the development of the self-concept. They are now ready to be workers and producers, and when they succeed they develop self-assurance. Inferiority on the other hand may develop if too much is expected or if they believe they can't "measure up" to the standards set.



Speech Development

During this period, children refine their language skills and increase linguistic competence. They use bigger words, produce longer and more complex sentences and learn subtle exceptions to grammatical rules. They begin to understand even the most complex syntactic structures of their native language.

- Talk, interact and promote communication with the child.
- Keep language at an understandable level; however, do not talk down or use "baby talk."

Health Risks for the Age Group

Unintentional Injuries	Injuries related to motor vehicle accidents are a leading cause of death for the age group. Provide information about proper seat belt use, use of personal protective equipment when using bikes, skates, etc., as well as minimizing risks in the home environment.
Infectious disease	Immunization remains important including initiation of Hepatitis B vaccine if recommended by the practitioner. Educate patient and family about hygiene practices, including hand washing.

Responses to Illness and Hospitalization

- Concern for disability and possibility of death
- Confusion about unknown events and procedures
- Loss of control and independence
- Interruption of daily routine, separation from peers, inability to participate in usual activities
- Fear of pain

Developmental Approaches to Care

Table 1: Interventions to promote school-age children's coping

INTERVENTION	RATIONALE
Provide privacy; make sure the child has underwear on before he wakes up and cover the body well with sheets.	The child is very aware of his sex and is concerned about modesty.
Provide concrete and complete explanations of procedures. Be specific about involved body parts.	Avoids surprises.
Always tell the child what you are going to do. Tell them honestly what they can expect.	Builds trust.
If something will hurt, tell him/her in advance. Determine any misconceptions and clarify with the child.	Allows the child to relax if he knows you will not cause him pain without warning.
Show what a surgical scar looks like.	Decreases concern r/t bodily mutilation.
Involve the child in his/her own care or in making decisions whenever possible.	Minimizes loss of control.
Reinforce positive coping behavior by praising, giving a sticker, etc.	Promotes emotional growth and independence.
During a painful procedure, give child something to concentrate on (e.g. squeezing your hand or bed rail, counting or yelling OUCH!).	Distract child's attention from painful procedure/test, etc.

Developmental Approach to Medication Administration

Table 2: Approach to Medication Administration School-age child

DEVELOPMENTAL BEHAVIORS	NURSING ACTION
Strives for independence but continues to be dependent on others at times.	Give acceptable choices when possible; for example, "Do you want the shot in your right or left arm?" Respect the need for some regression with hospitalization. Some children may find comfort in your doing more for them. For example, holding the medicine cup.
Differentiates actions that are dangerous.	Needs reassurance that you will give the injection safely.
Concern for bodily mutilation.	Needs reassurance that you will take care not to place the injection in highly visible areas, or that you again will take care to administer the injection safely.
Tells time correctly.	Include them in the daily schedule of medications. Provide stickers for calendar to mark off medications given.
Needs to know how things work.	Give careful explanations of how medications work and why they are given.
Increased need for privacy.	Find out from child if he/she wants the parent present for the injection.
Beginning concern for body image.	Drape carefully when giving injections.
Peers are of great importance.	Encourage peer interaction. Allow child to share medication experience with others.

Pediatric dosages are usually calculated by Body Surface Area (BSA) or body weight. Pediatric dosages are usually stated in terms of mg/kg or mg/m²

Normal Vital Signs of the School Aged Child

Heart Rate/min		Respiratory Rate	Blood Pressure	
Awake	Asleep		Systolic	Diastolic
65 – 110	60 – 90	18 – 30	97 – 115	57 - 76

Play Therapy Options

- 1) Fluid Intake
 - a) Make freezer pops using juice.
 - b) Use small medicine cups, decorate them.
 - c) Let child fill an oral syringe and squirt it into his mouth.
- 2) Deep Breathing
 - a) Blow bubbles with a straw.
 - b) Blow on pinwheel, feathers, whistle.
 - c) Blow up a rubber glove and allow to decorate with a face.
 - d) Pretend to “blow out the candles on a birthday cake”.

Considerations for Pain Management

A pain assessment is completed upon admission to the hospital. This assessment includes the pain history elicited from the patient and parents. Assessment methods may be altered to meet the developmental need of the patient. Children may need simple, single topic questions. Evaluate whether the child of this age can understand and use the 0 – 10 pain rating scale. An alternative is to use the facial expression scale that allows the child to identify which facial expressions best show how he feels in relation to pain. Include the patient and family in establishing pain relieving goals. Family and cultural values will greatly influence the child’s reaction to the pain experience.

Concept of Death

By the age of 10 years, the child views death as inevitable and universal. It is a lawful process that happens to all living things. It is final. Children at this age reflect feelings of sadness, loneliness, and fear related to death. Death becomes associated with pain as well as disease. Drawings by children between 9 and 12 years of age demonstrate progression of thought regarding death, using symbols, colors (primarily black and purple) and details (eyes closed, limp extremities, etc.).

Adolescence 12 – 18 years old

Adolescence begins when the reproductive system becomes functionally operable and is completed when physical growth is complete in late adolescence. During this period, the child strives to define his own identity, often relying on peer groups to recognize and incorporate social norms.

Physical Development

- The skeletal system grows faster than supporting muscles.
- Hands and feet grow proportionately faster than rest of the body.
- Large muscle development is faster than small muscle.
- Onset of puberty includes menarche for girls, development of axillary and pubic hair as well as facial and chest hair on boys.
- The young adolescent may be uncoordinated and tire easily. 9 – 12 hours of sleep are required per night.

Developmental Tasks

Erikson's Theory of Development places the child of this age in the Identity vs. Role Diffusion stage of development. In this stage, sense of self and identity are deepening. Unresolved issues result in poor self-concept and role confusion.

Social Development

Relationships with peers are extremely important and influence the behaviors and beliefs of the individual. Interest in the opposite sex increases. The adolescent seeks acceptance and contact with peers. Recreational activities include television, computer or video programs, reading, sports and dating and often relate to the group's interest. Body image and self-esteem are closely related. Yet, the child of this age may still be egocentric at times as important ideas and attitudes are evolving.



Personality and Behavior Development

Autonomy is important to the child of this age. The ability to analyze and think in logical terms has increased as they have had many opportunities to problem solve during the school age years. Additionally, the adolescent mind has a great ability to acquire and use knowledge. With this growth comes the desire to make decisions and have control over their lives. This drive to be independent often results in conflict with authority about rules and lifestyle decisions.

Cognitive Development

The adolescent has better thinking skills than the school-aged child primarily due to development of more advanced reasoning skills, abstract thinking skills and “meta-cognition.” Reasoning skills help the teen to think about multiple options for situations. The ability to think “hypothetically” is enhanced. Abstract thinking skills support the development of spirituality, trust and other non-tangible concepts. Finally, meta-cognition allows the adolescent to think about how they are perceived by others and helps with strategic thinking.

Five Significant Tasks of Adolescence

Establishing an identity	The adolescent is integrating the opinions and values of others to consider and establish his own values and beliefs. Those who influence this process include parents, other caring adults and friends.
Establishing autonomy	As identity is established the teen develops a sense of being self-sufficient and able to make decisions for himself. This period is sometimes considered “rebellious”, although the task helps the child to establish independence.
Establishing intimacy	Intimacy refers to engaging in an open, honest and trusting relationship rather than a physical one. During this age, intimate relationships are established with friends, allowing the teen to adapt social skills and phases of relationships.
Becoming comfortable with sexuality	During adolescence the body becomes sexually mature. With this the cognitive development leads to interest in sexual relationships. Concepts learned during this age impact sexual health.
Achievement	The teen begins to understand the relationship of their current abilities and their future aspirations. It is a time to recognize areas of achievement as well as those that are worth striving to improve.

Health Risks for the Age Group

Risk Factor	Considerations
Unintentional injuries	Physical injuries are the leading cause of deaths in adolescents. Major causes are motor vehicle accidents, firearms and sports. Emphasize the importance of following safety rules and using protective equipment.
Infectious Disease	Immunization is important beyond the elementary school years. Teens need booster for tetanus, possible updates of MMR and Hepatitis B vaccine. Sexual health promotion is essential during the teen years. Clear, complete information about maintaining sexual health is essential.
Substance abuse	Peer pressure and experimentation can lead to inappropriate use of alcohol, tobacco and drugs. Consistent and repetitive education about avoiding these behaviors from respected adults is beneficial in reducing substance abuse.
Pregnancy	Accurate and complete information about pregnancy prevention counteracts possible misinformation received from the peer group.
Nutritional excesses or deficits	Cultural eating patterns contribute to excessive intake. Altered body image may lead to eating disorders such as anorexia or bulimia.

Responses to Illness and Hospitalization

Although much has been gained in problem solving and analysis skills, the adolescent may not have a clear understanding of health care and illness/wellness concepts. Embarrassment about their body can lead to lack of communication with resulting misinformation. Information garnered from the peer group may not be accurate. Misconceptions can skew the decision-making process for the individual.

Body image is significant. Alterations caused by injury or medical treatment impact the self-image. Adolescents may fear that medical treatment will change their body and need appropriate information about what to expect.

Hospital routines may lead to a fear of loss of control. Separation from the peer group creates anxiety. The teen may be unclear about his personal role in the management of his own health.

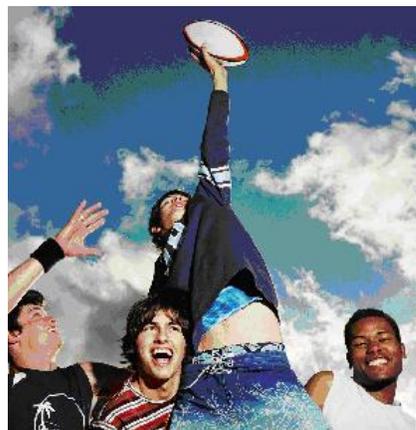
Developmental Approaches to Care

Consider the cognitive development	Provide explanation of procedures. The young adolescent may need simpler explanations with more detail provided with middle and late adolescents. Respect the need for time alone to process information and situations.
Desires self-control, needs trusting relationships	Involve the patient in the decision-making process. Offer choices when possible such as locations for injections, exclusion of family or friends during assessment, type of educational materials.
Consider possible misconceptions about their own body, disease and medical intervention	Ask open ended questions to assess understanding. For young adolescents, limit questions to single topics. Discuss and include the adolescent in the plan of care and goal setting. Provide a variety of educational sources such as video and printed material.
Need for privacy	Assure teen that privacy and confidentiality are respected and upheld.
Need for socialization and acceptance	Encourage visitation of friends and family

Medication dosing for the adolescent is usually the same dosing methods used for adults.

Normal Vital Sign Parameters of the Adolescent

Heart Rate		Respiratory Rate	Blood Pressure	
Awake	Asleep		Systolic	Diastolic
60 – 90	50 – 90	12 – 16	102 – 131	61 - 83



Considerations for Pain Management

A pain assessment is completed upon admission to the hospital. This assessment includes the pain history elicited from the patient and parents. Assessment methods may be varied to meet the developmental need of the patient. Young or early adolescents may need simpler, less detailed questions. Consider that family and cultural values will impact the patient's response to pain. Some may be reluctant to report pain. Use the 0 – 10 scale as a baseline and ongoing assessment tool. Give clear and complete instructions on how the patient uses the scale. Do not assume understanding. Ask open-ended questions to ascertain that the patient will be able to provide accurate self-reporting of pain. Include the adolescent in establishing goals for relief of pain.

Concept of Death

Adolescents experience significant physical and emotional change during the teen years. Concepts of death may be significant and by this age and the teen can recognize that death is permanent and inevitable. However, the cultural environment the teen has had exposure to significantly impacts social and emotional responses to death.

Early and Middle Adulthood

Early adulthood is the period following adolescence and approximately during the ages of 18-40 years old. The focus of this period includes completion of the many tasks required to become a self-sufficient and contributing member of society.

Middle adulthood occurs during the approximate ages of 40 – 65 years old. The physical changes associated with aging occur during this period. Many of the tasks associated with this period of development relate to the individual's desire to evaluate his own self-worth and value to the society.

Physical Development

- Physical, reproductive and cognitive maturity reaches a peak during **early adulthood**. Memory is at the optimal performance level for the individual. Muscular efficiency is at its peak between the ages of 20 and 30. The young adult may test theories relating to health maintenance such as regular exercise and eating a healthy diet.
- During **middle adulthood**, females experience menopause. With this comes an increased risk for loss of bone density, leading to osteoporosis.
- Both males and females experience the gradual thinning and compacting of the vertebral discs, resulting in the loss of up to two inches of height.
- Weight increases up to about age 40 – 50. This is generally due to the tendency to lead a more sedentary lifestyle resulting in a decrease of muscle mass. Loss of muscle slows the metabolic rate. When the metabolic rate decreases without changes in eating patterns, the adult gains weight. After age 50, weight begins to decrease. The loss of fat under the skin together with the skin becoming less elastic leaves the individual with wrinkling.
- This slowing also is evident in the GI system where the salivary glands decrease production. Sense of taste begins to become less sensitive. GI motility may slow.
- As individuals age, visual changes are the result of farsightedness.
- The sensations of touch and taste begin to become less sensitive during the middle adult years.

Developmental Tasks

Erikson's Theory of Intimacy versus Isolation describes the **early adult**. During this time the individual struggles with the task of giving up some independence to share an intimate relationship with another. There is a conflict between independence and interdependence. How this task is resolved sets the person up for the level of maturity reached in middle adulthood.

The task of the **middle-adult** aged person is Generativity versus Stagnation. Great effort goes into raising children and guiding them into responsible adults. The person's career is at its peak. Success in these areas leads to a feeling of satisfaction and self-worth.



Social Development



Actions addressed during early adulthood include:

1. Selecting a mate.
2. Establishing a home.
3. Choosing a career.
4. Learning to live with a spouse or partner.
5. Raising children.
6. Experiencing sexual satisfaction.

Social activities of the middle-aged adult:

1. Learning to separate and view grown children as adults themselves.
2. Development of hobbies or other personal interests.
3. Achieving satisfactory career goals.
4. Contributing to society with civic responsibility.

Cognitive Development

Adults learn best when information is received at a time when it is practical and applicable for the individual. Mental potential peaks during the early adult stage but learning continues across the life span through formal and informal educational experiences. Much of what is learned is problem- or goal-oriented in that it is meaningful to the individual. During middle adulthood, thinking processes begin to slow. However, the adult of this age can use life experiences to look at old problems in a new light and consider alternative solutions.

Health Risks for the Age Group

Risk Factor	Considerations
Unintentional injuries	Accidental injuries are the leading cause of death in young adults and the third leading cause in middle adults. Emphasize the importance of following safety rules and using protective equipment.
Cancer	Provide education about self-assessment for breast and testicular cancer, as well as lifestyle choices to minimize risk factors, (ex: smoking cessation)
Cardiac disease	Periodic assessment of risk factors is important during the middle adult years. Education about minimizing risk through, diet, exercise and nutrition is appropriate.
Infectious disease	Immunization is important in the adult years. Tetanus prevention requires booster doses every 10 years. Persons at risk for Hepatitis B may consider undergoing immunization therapy. Knowledge of sexually transmitted disease and prevention can reduce risks.

Responses to Illness and Hospitalization

The developmental tasks of developing a career, maintaining a home and raising children can be significantly impacted by illness. The result may be a patient who feels out of control and frustrated or frightened by the inability to continue the tasks. Consideration of the impact of hospitalization/illness is necessary for the patient or family to plan for this period. For those with chronic illness, referrals to Social Services or professional organizations, such as the American Diabetes Association, are beneficial.

Developmental Approaches to Care

Desires independence and self-directed lifestyle	Promote participation in health care decisions. Offer choices about educational opportunities, disease management, medication routines, etc. Provide information about Advance Directives.
Self worth in relation to contributing to others	Assess the impact of hospitalization on career, home and relationships and provide resources to support the individual.
Gains knowledge through problem or goal orientation	When providing patient education, prioritize information that can be immediately and practically applied. Present material that is relevant and meets the individual's need. Determine how the patient prefers to receive information, e.g. video, printed materials, or discussion.
Role in society is highly valued	Consider cultural influences in how the patient responds to illness

Considerations for Pain Management

A pain assessment is completed upon admission to the hospital. This assessment includes the pain history provided by the patient. Consider that family and cultural values will impact the patient's response to pain. Some may be reluctant to report pain. Explain that the self-reporting of pain is essential in managing it. Use the 0 – 10 scale as a baseline and ongoing assessment tool. Ascertain that the patient can use the tool correctly. Collaborate with the patient to establish a pain management goal using the pain scale as a measurement.

Concept of Death

Young adults think of death in terms of the loss of a friend or loved one. Middle adults focus more on the impact that their own death would have on their family or friends. While adults do not dwell on their own mortality, the loss of a friend or relative brings the subject to the forefront. Some fear is associated with death and the notion of one's own mortality. For middle adults, this brings about concern for life goals that have not been completed and the realization that they may never be.

Late Adulthood - Approximately 65 years and Older

During late adulthood, many psychosocial and physical changes affect the functional ability of the older person and contribute to the need for an adjusted lifestyle. However, while many of these changes are associated with aging, they are not predictable. Individuals vary greatly in their responses to aging. Some may experience little change from middle adulthood until well into the older adult years. Others may experience profound changes at a younger age. How a person ages is influenced by heredity as well as how they lived in their adult and middle years. In effect, aging is a normal, developmental process, which can be significantly impacted by various disease states.

Physical Development

- Hair becomes thinner, gray.
- Skin loses elasticity and moisture, wrinkling occurs.
- Sensory perception decreases: loss of taste buds decreases taste sensation; hearing loss especially to higher pitched tones may decrease; visual changes diminish acuity; touch sensitivity decreases.
- Muscle and bone mass decrease.
- Continuation of vertebral disc compression leads to loss of height.
- Decreased effectiveness of the immune system heightens risk for infectious disease and cancers.
- Cardiac and renal function decline.
- Arteriosclerosis contributes to peripheral and systemic disease, including cardiovascular and cerebrovascular disorders.
- GI motility slows, gastric emptying becomes delayed and absorption rates are prolonged.
- Prostate enlargement in males interferes with bladder functioning and sexual performance.
- Motor responses may slow.

Developmental Tasks

Erikson's stages of development theory suggest that the task of the older adult is Integrity versus Despair. This is a time for reflection about one's past life experiences. Leisure time activities and concern for the future of society remain as important objectives. At the same time, the elderly must learn to adjust to physical changes of aging as well as psychosocial changes typical of this period.



Social Development

Many social adjustments occur during this late period of life. Families may find that the established roles must be adjusted to accommodate the needs of the older member. However, some elderly find that family relationships diminish as the routines are focused more on the younger members of the group. This may lead to social isolation.

For many elderly, adjustment to retirement is one of the first developmental tasks of this age group. The loss of employment may lead to newfound freedom that allows the individual more time to pursue personal interests and relationships. Some, however, battle with the loss of responsibility and identification associated with employment. They may struggle with filling their free time and develop depression and a sense of isolation.

Physical decline leads to changes in the social structure and habits. Physical health often dictates how active in social activities the senior can be. Daily activities, such as driving and shopping, may become restricted by physical limitations.

Grief and acceptance of death are appropriate psychosocial issues facing the older adult. Many times there has been a loss of friends, family or spouse. A developmental task of this age is to recognize and come to terms with one's own mortality.

Cognitive Development

Cognitive changes associated with the normal process of aging include slowing in the ability to process information. The speed of mental responses begins to decline in the seventies. This can impact both motor and sensory responses. This is probably due to neurobiological changes in the central nervous system. However, the person's intellect may remain intact despite the decline in the ability to retrieve and respond to information. Changes in memory may also occur during the aging process. Short term memory may be more difficult to retrieve than long term memories.

Health Risks for this Age Group

Risk Factor	Considerations
Cardiovascular disease	Educate on the need for regular physical exams, maintaining normal blood pressure, nutritional and exercise goals.
Infectious disease	Immunization remains an important goal. Most elderly benefit from flu vaccination. Pneumonia vaccine may be considered by the practitioner.
Cancer	Educate about signs of cancer to promote early detection and health behaviors to minimize risk.
Nutrition	Nutritional intake may be altered due to social patterns, physical changes, and emotional states. Assess for nutritional status and provide intervention to promote proper nutrition and decrease associated health outcomes of malnutrition.
Self-care deficits	Assess for deficits and intervene or provide referrals to compensate
Unintentional injury	Physical changes associated with aging increase the individual's risk for falls. Educate about minimizing fall risk in the home environment. Bone loss can result in increased fracture risk.

Responses to Illness and Hospitalization

During the early and middle adult years, the concern for hospitalization often centered around the impact on the family, especially managing for childcare. In late adulthood, this isn't usually an issue. However, there may be great concern for a spouse alone at home or even for pets that had been cared for by the hospitalized individual. Managing self-care and continuing to care for others in the home become the concern of the ill elderly. Additionally, with the onset of retirement, many elders survive on a limited and fixed income. They may experience issues associated with the financial cost of health care. Finally, if the state of illness is considered terminal, the process of coping with one's own mortality comes into play.

Cognitive changes sometimes seen during a period of acute hospitalization require careful and complete assessment to identify the cause. A change of environment, alterations caused by illness such as infectious processes and the impact of medications may leave the elderly person confused or disoriented. Correction of physiological causes can eliminate the altered mental state and restore the person's thought process to normal.

Developmental Approaches to Care

Desires reflection and assurance that life has been worthwhile	Allow open-ended communication. Listen to life stories.
Social impact of aging	Promote visitation by friends and family. Refer to Social Services for concerns about financial cost of illness, separation from spouse or other loved ones
Decreased senses	Speak in clear, low tones while facing the patient. Keep assistive devices such as glasses within reach.
Altered cognitive responses	Provide explanation of all procedures to minimize fear. Allow support of family/friends. Provide diversion activities. Promote orientation with verbal cues, clock at bedside, etc.
Need for autonomy	Promote participation in healthcare decisions, offer choices about educational opportunities and provide information about Advance Directive.
Physiological slowing of organ systems	Possible need for nutritional supplements. Consider how medication dosing might be altered to allow for physical changes. Eliminate risk for injury in the environment.

Considerations for Pain Management

A pain assessment is completed upon admission to the hospital. This assessment includes the pain history provided by the patient. Consider that family and cultural values will impact the patient's response to pain. Some may be reluctant to report pain. Many seniors have experienced pain for a long period of time and may minimize or under report their pain experience. Explain that the self-reporting of pain is essential in management of it. Use the 0 – 10 scale as a baseline and ongoing assessment tool. Ascertain that the patient can use the tool correctly. Collaborate with the patient to establish a pain management goal using the pain scale as a measurement.

A team approach to pain management is especially beneficial with the elderly. Medication regimens may need to be altered to counterbalance the effect of aging on the metabolic system. Oral medications may be absorbed more slowly. Altered metabolism can reduce the clearing of the drug, prolonging half times. Metabolites of drugs, such as Meperidine, can cause cognitive impairment. Many elderly are on multiple medications for disease management and all must be considered when choosing acute and chronic pain relieving therapy. Non-pharmacological treatment may be beneficial in reducing discomfort, such as the use of physical therapy to treat pain associated with musculoskeletal disorders.

Concept of Death

The developmental task of late adulthood leads one to consider how his life has impacted others or society at large. This reflection is necessary to move on to the process of dying. At this late age, one's own mortality is considered as the loss of friends and family occurs. Death is viewed as the final stage of development and an inevitable outcome.

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