Age-Specificity in Patient Care

RSPT 1191

Age-Specific Issues

• Competencies
• Safety
• Education
• Hospitalization considerations
• Patient vs. patient/care giver situations

Education Requirements

• More and more, healthcare providers are being required to provide and document competencies in age-specific care
• Many hospitals have established Interdisciplinary Teams
• Driven by The Joint Commission and Medicare

Education Requirements

To properly educate patients, we must
• recognize different learning styles
• understand the psychosocial needs of different age groups
• use this information to convey the message
• test the patient

Learning Styles

• Recognize and respect your patients’ learning style
• “Gestalt” learners need to see the whole picture first; then work out the details
• “Visual” learners find demonstrations, pictures and diagrams far more accessible than words

Learning Styles

• “Stream-of-consciousness” learners may catch on better if you tell the story of a typical patient, adding variations to fit the individual
• “Concrete” learners do well if you give them a set of rules
• “Hands-on” learners don’t trust their ears; they want to handle something to see how it works
Learning Styles

- Explain things in different ways and use several methods that reinforce each other
- Verbally explain…
- Use visuals…
- Encourage questions…
- Follow up…

Testing

To measure the success of teaching
- Set S M A R T goals
  - Specific
  - Measurable
  - Attainable
  - Reasonable
  - Time oriented
- Measure outcomes

Testing

- “Yes, I understand” may mean “No, I’m confused, but I know you don’t have the time to explain it again”
- Have patients explain your explanation in their own words
- If possible, have the patient demonstrate

General Tips

- Be professional
- Use examples and analogies
- Minimize medical terminology
- Use familiar concepts, not just scientific ones
- Use a positive approach
- Focus on what your patient must do, and not do, to have a better outcome
- Listen to the concerns of patients and families

Primary & Secondary Populations

Age-Specific Care

Primary
- If you provide care across the lifespan, you should be competent in dealing with all age groups
- If you provide care to only one age group, your competencies need only reflect that group

Secondary
- Should also be familiar with issues of the populations associated with your primary age group
The Pediatric Population

Physiologic Considerations

• A normal healthy 7 lb. newborn
  – 1/3 length
  – 1/9 BSA
  – 1/20 weight
• Significant differences exist in body systems and vital signs

Physiologic Considerations

• This group is unique physiologically, psychologically and developmentally
• Infants and children are *not just small adults*
• Significant differences also exist between the various age groups in the pediatric population

Body Systems

• Respiratory
  – Respiratory failure one of the most common causes of emergencies
  – More sensitive to respiratory alterations
    • Hypoxemia as a response
  – Sensitivity due to differences in anatomy and physiology

Body Systems

• Cardiovascular
  – Oxygen reserve is limited
  – Anything affecting oxygen delivery or consumption can lead to compromise
  – Tachycardia is common and normal in the compromised pedi patient
  – Bradycardia is an ominous sign of pending cardiac arrest
Body Systems

- Cardiovascular
  - With any alteration of heart rate - assess the respiratory system first
  - Cardiac dysfunction is most commonly triggered by respiratory failure
  - Also monitor BP
    - Normal BP may not rule out problems, but may be an indicator of a failure in compensation and possible cardiac arrest

Body Systems

- Neurological
  - More susceptible to neuro injuries
  - Spinal cord injuries less common
  - Neuro injury is high risk, but if Glasgow score is 5-8 mortality is lower than with adults
  - Aggressive resuscitation is warranted

Body Systems

- Hepatic
  - Liver is proportionately larger
  - Meds may have prolonged effect

Body Systems

- Thermoregulation
  - Infants and children have larger BSA in relation to weight
  - Relatively small amount of subcutaneous fat and poor vasomotor control
  - 75% of heat loss is through head
  - Infants seldom shiver
  - Stress of hypothermia can be detrimental

Infants: 0-12 months

Psychosocial Development
- These patients experience the world solely through their senses
- Distress occurs when needs are not met, or if they sense fear in those around them
- Respond to rocking, cuddling, cooing and smiling
- Research indicates that parental anxiety is transferred to the child

Infants: 0-12 months

Educational Needs
- Obviously, most education is directed toward parents
- Parent or primary care giver should be present and involved in toddler’s care
Toddlers: 1-3 years

Psychosocial Development
- Progressing through the stage of autonomy vs. self-doubt
- Strongly independent one minute, then needy and dependent
- Individuality becomes more apparent – the psychological goal is autonomy
- Prone to separation anxiety; may become severely stressed

Toddlers: 1-3 years

Psychosocial Development
- Should be allowed to keep special toys, pajamas, etc.
- Limited coping skills and limited ability to express themselves
- May actually comprehend more than we know, but can’t communicate due to limited language skills
- Work with parents to avoid disrupting routines
- Work with parents to determine how the child acts when afraid or in pain
- Know where child is with other developmental milestones

Toddlers: 1-3 years

Educational Needs
- Parent or primary care giver should be present and involved in toddler’s care
- Child should be involved in all interactions and communications
- Explanations of procedures and equipment should be simple and short

Toddlers: 1-3 years

• Allow toddlers to handle equipment when appropriate (i.e., stethoscope)
• Using play and toys to “act out” explanations may be effective
• Give toddlers control over some aspects of their care – allow them to make choices

Preschoolers: 4-5 years

Psychosocial Development
- Developing true independence; but may regress to dependency due to situation
- Have strong fears of pain and/or disfigurement - may act out these fears with anxiety, hostility or aggression
- May develop unwarranted guilt feelings
- Have longer attention span and are can understand a little about how their bodies work if given simple explanations

Preschoolers: 4-5 years

Educational Needs
- When possible, use visual aids and “act out” procedures to involve the child in learning activities
- Provide play materials to help explain procedures or treatments
- Again, when appropriate, let the patient handle equipment
Preschoolers: 4-5 years

- Relate procedures to something with which the child is familiar
- Explain things simply, then ask the child to explain his or her understanding
- Give the patient a chance to demonstrate his or her understanding

School Age: 6-12 years

Psychosocial Development

- This stage is sometimes called the “quiet years” – child is striving for approval and to be “good”
- May not voice their fears or complain of pain
- Have an expanded vocabulary and interact well with others
- Interested in learning and are taking more responsibility for their own care and actions

School Age: 6-12 years

- May still exhibit separation anxiety – not only from parents but from school friends, as well
- It is important to allow for as much individualization and self-care as possible

Educational Needs

- Explanations can now be more complex and conversations can involve more critical thinking
- Explain all procedures and be honest about any pain or discomfort involved
- May begin preparing the patient several days before a hospitalization or procedure, as compared to several hours for younger children

Adolescence: 13-19 years

Psychosocial Development

- Probably the most challenging and complicated period of life
- More changes – physical and psychological – than in any other stage
- Behavior fluctuates from dependence to independence, idealism to realism and confidence to uncertainty
- Able to verbalize and understand most adult concepts

Adolescence: 13-19 years

- Beginning to build their theories about philosophy, morality, love and the adult world
- Able to think logically and abstractly
- Have developed a longer attention span
- Question authority
- Have strong need to “fit in” with their crowd
- Prefer to be with those of their own age
- Want to be independent of their parents, but realize this is economically impossible
Adolescence: 13-19 years

Educational Needs
- Respect the need for privacy
- Explain all procedures thoroughly, including possible discomfort, pain, etc.
- Explain all expectations and restrictions
- Involve both the adolescent and the parents in discussion about care
- Respect the patient as an individual, separate from parents

The Adult Population

Young Adult: 20-45 years

Physical Development
- At their maximum peak of efficiency; starting a slow, but inevitable decline
- Accidents and physical stressors e.g. lack of sleep and substance abuse are the most common source of disabling biophysical problems

Cognitive Development
- At their maximum ability to acquire and use knowledge
- These patients have a tremendous potential for problem solving and both critical and creative thinking

Psychosocial Development
- Basically, a fairly healthy population
- Primary goals
  - Intimacy
  - Mate selection
  - Marriage and its adjustments
  - Starting a family/raising children
  - Home management
  - Career launching
  - Civic responsibility
- Trying to enter into and manage multiple roles
- Conflict between family and career
- Major self-concept theme is “I can handle it”
- Expect medical problems to be “fixed” with little or no downtime
### Young Adult: 20-45 years

**Hospitalization concerns**
- Most frequent acute conditions
  - Minor accidents
  - Drug abuse
  - Respiratory infections
  - Influenza
  - Gastroenteritis
  - Urinary tract infections
  - Minor surgery
- Illness is seen as a disruption in life activities and is treated as a situational crisis

**Educational Needs**
- Provide thorough explanations and informed consent
  - They pride themselves in their decision-making capabilities
- This age group has strong need for control
  - Include them in all care-related discussions
- Family is the primary social institution, and should be involved as much as possible

### Middle Aged Adult: 45-65 years

**Physical Development**
- Structural and functional changes are now more obvious
- First noticeable signs of aging
  - Dry skin and wrinkles
  - Thinning and graying hair
  - Inches on the waist and hips
- Most will notice declining muscle strength and agility and will make small compensatory changes

**Cognitive Development**
- Adult intelligence is affected by education, social class, illness, personality and motivation
- Those with above average IQs, who have more formal education and have continued to use intellectual processes will demonstrate greater increases in intelligence throughout adulthood
- Some may fear becoming forgetful, but no real decline in memory has been demonstrated until old age

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Middle Aged Adult: 45-65 years

Psychosocial Development
- More prone to chronic health problems
- Condition is determined more by how they feel than by chronological age
- Tend to be better established in career and family roles and a sense of productivity at work and creativity in living are important developmental components
- Are balancing several roles in family, career and community

This stage is often referred to as the “payoff years”
- Experiencing maximum influence, heightened self-perception, self-approval and self-direction
- These patients are in mature family relationships and may be adjusting to aging parents and launching teenage children
- Taking on more social and civic responsibility
- More secure in career and family

Hospitalization concerns
- Potential for family dysfunction with hospitalization
- Hospitalization may disrupt occupational goals
- Hearing and vision problems as well as chronic illnesses may be emerging

Middle Aged Adult: 45-65 years

Educational Needs
- See illness as disruption of life and a possible threat to family and/or career
- Require very thorough explanations
- Need information on risk factors and chronic illnesses
- Allow these patients to make their own decisions about care and health

Middle Aged Adult: 45-65 years

Physiology of Aging
- Onset and course of aging are variable – some are “old” at 55, some are “young” at 80
- Decline is inevitable as body cells demonstrate decreased ability for cellular division and repair, independent of stress, trauma and disease

Middle Aged Adult: 45-65 years

- Stress the need for regular medical attention
- Provide information on life style behaviors
- Be aware of hearing and vision problems and treat accordingly
- Allow verbalization – be a good listener

Aged Adult: over 65 years

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Aged Adult: over 65 years

Cardiovascular System
• Prone to cardiac disease
• Organ perfusion and compensatory regulation are decreased
• Atherosclerotic changes often present
• Heart valves may begin to calcify
• Increased chance of myocardial irritability and left ventricular hypertrophy
• Cardiac output is decreased due to increased BP and decreasing HR

Aged Adult: over 65 years

Respiratory System
• TLC decreases
• A-P diameter increases; diaphragm flattens
• Chest wall rigidity increases
• Alveolar surface area decreases
• PaO₂ decreases
• All changes are aggravated by smoking

Aged Adult: over 65 years

Central Nervous System
• Decreases in neuronal density and conduction - reflexes are slower
• Sympathetic nervous system response decreased
• Higher incidence of organic brain syndrome, CVAs and multi-infarct dementia

Aged Adult: over 65 years

Gastrointestinal System
• Salivation, peristalsis and hepatic blood flow are all decreased
• Appetite is decreased; weight loss follows
• Absorption of oral meds and nutrients is decreased; therapeutic ranges may be difficult to obtain

Aged Adult: over 65 years

Renal System
• Decreased glomerular filtration; leads to decreased med clearance and fluid and electrolyte imbalances
• Sphincter weakening and decreased bladder capacity and muscle tone lead to increased chance of urinary incontinence

Aged Adult: over 65 years

Orthopedic
• Bone mass greatly decreases
• Increased risk of pathologic fractures, pain and skeletal deformities
• Care should be taken to protect and pad these patients
Aged Adult: over 65 years

**Endocrine/metabolic**
- BMR decreases at a rate of 1% per year after age 30
- Higher risk for NIDD

**Body composition**
- Greater risk of hypothermia
- Epidermis and collagen also atrophy, increasing risk for developing skin breakdowns and decubitis ulcers

**Senses**
- All are reduced
- **Vision**
  - Eyesight deteriorates and may be exacerbated by cataracts or macular degeneration
  - Make large print info available
  - Always identify yourself
- **Hearing**
  - Often deteriorates; should be routinely assessed
  - Hearing aids should be checked regularly
  - Provide CCTV/video when possible
- **Smell and taste**
  - Decreasing senses lead to decrease in taste and a corresponding decrease in appetite and weight loss
  - Detecting food spoilage is difficult
  - May also be less likely to notice smoke
- **Touch**
  - Decreased sense of hot and cold
  - Less likely to be aware of pressure points

**Pharmacologic Considerations**
- Extra care should be taken to monitor all meds
- May be taking multiple meds from different providers
- Monitor for the twin possibilities of malabsorption and toxicity
- Especially in patients with renal or hepatic anomalies
- Diseases can affect organs responsible for drug metabolism and excretion

**Hospitalization Considerations**
- Explain and ensure understanding of Advance Directives
- Obtain a thorough socioeconomic history to assist with discharge planning
- Allow time for thorough orientation to the environment
- Assess for risk of falls and take appropriate preventive actions
- Encourage participation in all areas of care
- Allow patient and family to verbalize feelings
# Aged Adult: over 65 years

## Psychosocial Development
- Fastest growing segment of our population
- Final task in psychological development is to determine between integrity and despair
- Adjustment to retirement is a major event
- Friendship and family bonds are central to well-being

## Educational Needs
- Explain and ensure understanding of Advance Directives
- Allow time for thorough orientation to the environment
- Be specific in explanations
- Encourage active participation in all areas of care

- Allow patient and family to verbalize feelings
- Obtain a thorough socioeconomic history to aid in discharge planning
- Help patient assess his or her risk factors and take appropriate measures
- Assist patient with setting up schedules