Age-Specific Considerations in Patient Care

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ACKNOWLEDGEMENTS

RN.com acknowledges the valuable contribution of…

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She presents continuing education offerings at a variety of national and regional conferences. She has published on the topics of critical thinking, test construction, competency testing, precepting and career development. She has also written numerous continuing education self-study courses and prepared competence tests for a variety of nursing specialties. She serves on the editorial board of the Journal of Continuing Education in Nursing and on a regional advisory board for *Advance Magazines*.

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She earned her BSN at Syracuse University and her MSN and Ph.D. in educational psychology at Loyola University of Chicago.

PURPOSE & OBJECTIVES

The purpose of *Age-Specific Considerations in Patient Care* is to provide healthcare professionals with information about different age groups, how to identify needs related to these age groups, and how to vary patient care issues with age specific needs in mind.

After successful completion of this course, the participant will be able to:

1. Explain what is meant by the term: age-specific competency.
2. Identify age-specific differences in the nurse's response to a patient's rights and basic needs.
3. Identify nursing actions that differ among age groups based upon physical and motor/sensory differences.
4. Identify nursing actions that differ among age groups based upon cognitive differences.
5. Identify nursing actions that differ among age groups based upon psychosocial and developmental differences.
6. Name nursing actions that reduce risks to which specific age groups of patient are vulnerable.
7. Explain how a patient's individual characteristics other than age, such as culture or work role may combine with age-specific considerations in nursing actions.

INTRODUCTION

Your patient has no hair on his head. He does not speak.
Your nursing care for him will include feeding him and changing his diaper.

Do you have a mental picture of this patient? Do you imagine a normal newborn? A brain-injured teen-ager post neurosurgery? A middle-aged man who has received surgical and chemotherapy treatments? An elderly man who has had a cerebrovascular accident?

The description might fit any of those patients. However, you care for each one quite differently because each age group has unique characteristics and needs: physical, including motor/sensory attributes; psychosocial and developmental tasks; cognitive and intellectual functioning, and major fears and stressors.

AGE-SPECIFIC COMPETENCY REQUIREMENTS

Joint Commission on Accreditation of Healthcare Organizations (JCAHO) assesses competence of facility staff as a part of the accreditation process. To comply with standards related to staff competence, facilities must define the patient population served, the age and special needs groups within the patient population, and the staff members who deliver services to the patient population. Further, JCAHO clarifies that the hospital must assess competency of staff members, clearly addressing the special needs and behaviors of specific age groups of the patients whom they serve.

Each facility has defined age groupings of the population it serves. Many hospitals designate the following four categories:

- Neonatal and infant
- Child and adolescent
- Adult
- Geriatric

However, some facilities identify additional subcategories depending upon the population served. Specialty organizations such as the American Academy of Pediatrics and The John A. Hartford Foundation for Geriatric Nursing recognize additional age groupings of pediatric patients and geriatric patients.

Know the framework used in your facility and the age group served by your patient care area. In addition, locate and use the specialized assessment tools pertinent for patients in the age group for whom you provide nursing care. Examples include pediatric pain assessment tools, cognitive assessment tools for elders, and fall risk assessment tools. Refer to the policies and procedures your facility has created to guide the use of specific tools.

Each state has laws governing age-related implications for healthcare professionals. Learn the requirements of the laws of your state related to treatment of minors and reporting child abuse, domestic abuse and elder abuse. Your state Nurse Practice Act will contain most, if not all, of this information. The policies and procedures of your facility give direction for complying with these and other age-related legal requirements.

Continually update your knowledge of health risks and safety precautions specific to the age group of patients with whom you work. Know the normal findings for physical assessment, laboratory and other diagnostic tests specific to the age group to whom you provide care and the specialty in which you work – that level of detail is beyond the scope of this course.

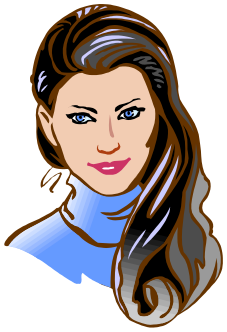
HOW AGE MATTERS

Regardless of a patient's age, nurses must respond to the patient's need for:

- Safety
- Privacy
- Confidentiality
- Comfort
- Pain Management
- Choices and control
- Involvement of family and/or significant others

Depending upon the age of the patient, the nurse may use different approaches, assessment tools, or equipment to address the needs. These needs are also patients' rights and must be respected.

In some aspects of care, your actions vary greatly with the age of the patient:

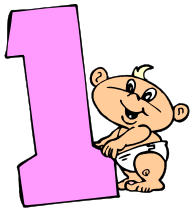


- Performing physical assessment and interpreting the findings
- Administrating medication
- Assessing and addressing nutritional status
- Communicating
  - Encouraging the patient to ask questions
  - Using an appropriate style and complexity of language, both oral and written
  - Explaining interventions and procedures
- Involving the patient in care and decision making
- Providing instruction and education
  - Choosing appropriate techniques and tools
- Selecting medical equipment, and supplies
- Assisting the patient to cope with hospitalization
- Assessing risk for injury and instituting preventive measures

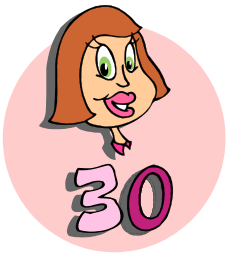
AN AGE-SPECIFIC FRAMEWORK

This course identifies seven age groups within which to highlight age-specific variations and nursing actions:

- Neonates
- Infants
- Toddlers
- Child
  - Preschool
  - School-aged
- Adolescent
- Adult
  - Young
  - Middle-aged
- Elder
  - Older
  - Oldest



Although the groups in your facility may differ, apply the information supplied in this framework to the framework in use at your facility.



AGE-SPECIFIC NURSING ACTIONS

All Pediatric Patients

Administering Medications

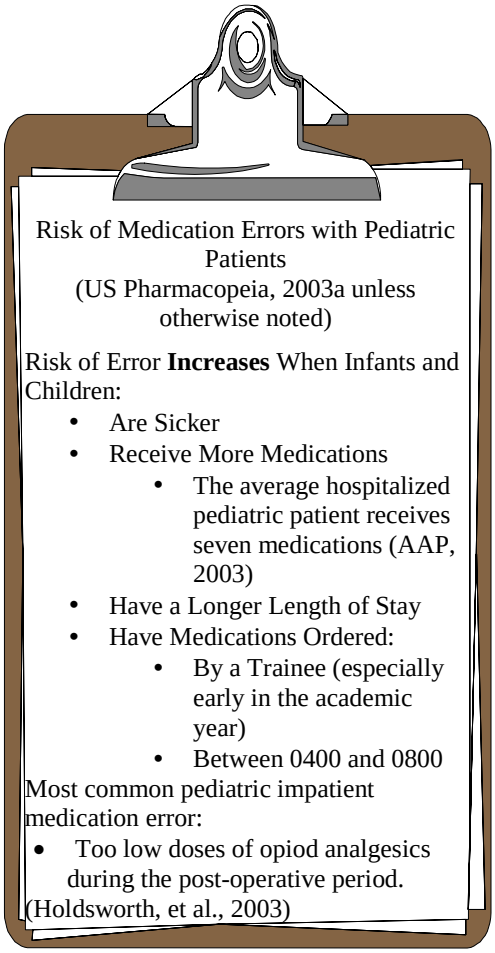
Administering medications to infants and young children requires extra caution. Drug manufacturers conduct only minimal drug safety research with children. Because of their small size and immature body systems, pediatric patients are at increased risk for adverse effects of medication. Preparing pediatric dosages often involves mathematical calculations, which also increases risk of error. In fact, one study found that calculation errors account for 60% of medication errors involving pediatric patients (research of Lesar cited by American Academy of Pediatrics, 2003). The same study identified that nearly 70% of medication errors reported involved pediatric patients. Medication errors are three times more common among pediatric patients as compared with adult patients and have ten times the potential for harm (USP, 2003).

Initiating and Monitoring IV Therapy

Risks also accompany IV therapy with infants and children. Inserting a peripheral IV is complicated by:

- Small, fragile veins which may be difficult to stabilize
- Lack of cooperation from the child and/or parents

Once the IV is placed, older infants and children often want to play with the IV tubing. Secure the site using a transparent dressing to allow easy visibility and accessibility for palpation. Inspect and palpate the site every hour. Infants and small children have flexible subcutaneous tissues that distend readily to accommodate infiltrating fluid. Avoid wrapping tape too tightly – excessive pressure can cause infiltration or phlebitis. Complications of IV therapy with young children often result in severe tissue damage and even loss of limbs. Hourly assessment and extra caution with infusions containing vesicants can prevent these untoward outcomes (Lamanga & MacPhee, 2004).



Risk of Medication Errors with Pediatric Patients
(US Pharmacopeia, 2003a unless otherwise noted)

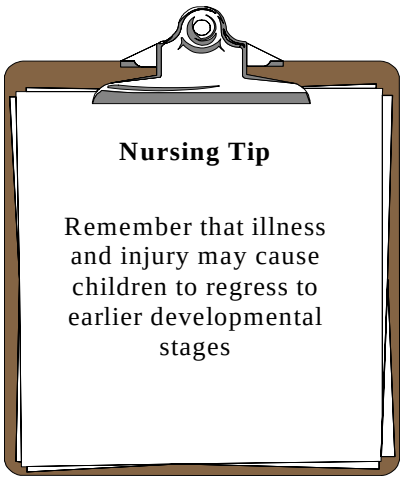
Risk of Error **Increases** When Infants and Children:

- Are Sicker
- Receive More Medications
  - The average hospitalized pediatric patient receives seven medications (AAP, 2003)
- Have a Longer Length of Stay
- Have Medications Ordered:
  - By a Trainee (especially early in the academic year)
  - Between 0400 and 0800

Most common pediatric impatient medication error:

- Too low doses of opiod analgesics during the post-operative period.

(Holdsworth, et al., 2003)



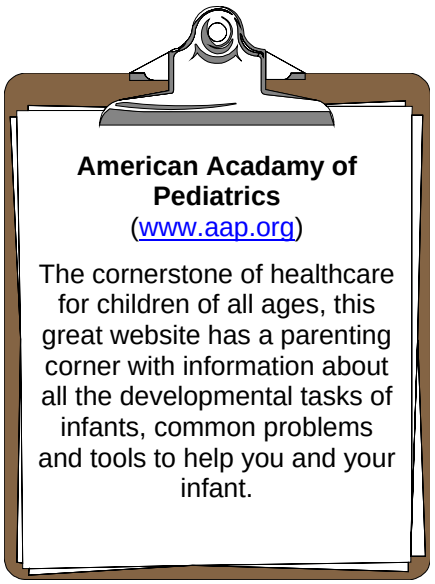
Nursing Tip

Remember that illness and injury may cause children to regress to earlier developmental stages

Pediatrics up to Age 12

Neonate, ages 1 day to 28 days

- Developmental Task = Trust versus Mistrust, development of the ability to rely on others.
- Cuddle and hug. Gentle kinesthetic stimulation promotes neural development. Cuddling also facilitates development of trust.
- Risk-prevention
  - Position on the back for sleep, to prevent suffocation.
  - Initiate Sudden Infant Death Syndrome (SIDS) preventive interventions.
  - Use extreme caution in administering medications and assess potential influence of maternal medications on the neonate. Moore, et al. (2002) reported that among children younger than 2 years of age, about 40% of the fatal adverse drug events occurred among children during their first month of life.
  - Position properly during feeding and burp the neonate. Risk for aspiration is high due to immaturity and proximity of respiratory and gastrointestinal passages.
  - Touch gently over the anterior and posterior fontanels, which are still soft.
  - Assess body temperature and maintain constant environmental temperature. The neonate is at risk for both hypothermia and hyperthermia due to immature heat regulation system.
  - Assess fluid balance. Neonate is at risk for dehydration due to immature renal function, high metabolic rate and insensible fluid loss.
  - Protect from stressors such as lights, noise, and excessive handling. Because of physical immaturity, the neonate has limited ability to manage stressors.
- Recognize that the neonate's behavior is largely reflex in nature.
- Facilitate bonding with the parents, especially the mother.



Infant, ages 29 days to 2 years

- Developmental Task = Trust versus Mistrust, development of the ability to rely on others.
  - Mistrust may result in failure to thrive.
  - Give familiar objects for comfort.
  - Limit number of strangers present.
- Promote bonding to parents.
  - Keep parents in infant's line of vision. Separation from primary caregiver is a major fear of the infant.
- Assess carefully and use mother or primary caregiver's insights to interpret behavior. The infant has limited ability to express needs or problems.
- Minimize stressors: strangers, loud noises, bright lights, and sudden environmental changes.
- Risk-prevention
  - Prevent choking or other injury due to foreign objects in the mouth. Infants tend to place objects in the mouth. The infant is in the oral stage of development, as described by Freud.
  - Protect from upper respiratory infection and aspiration. The infant is particularly vulnerable due to small airways, proximity of gastrointestinal and respiratory passages, and immaturity.
  - Protect from infection. The infant has a limited immune response.
  - Assess respiratory status carefully. Poorly developed accessory muscles of respiration and limited diaphragmatic excursion may lead to respiratory failure.

- Assess fluid balance carefully. The infant is vulnerable to fluid, electrolyte, and acid-base imbalances.
- Assess nutritional needs. The infant has a high metabolic rate and due to liver immaturity has limited ability to store glycogen and respond to glucose needs.

- Provide visual, auditory, and tactile stimulation to support development.
- Cognitive and motor development depends upon age in months. Consult more detailed references for monthly milestones during the first year of life.

Toddler, ages 1 years to 3 years

- Developmental Task = Autonomy versus Shame or Doubt
  - Give attention and approval to build pride in self.
  - Expect "No" as a negative expression of autonomy.
- Expect exaggerated response to pain, frustration and changes in the environment. Toddlers are often ritualistic. They are impulsive and their moods change quickly.
- Use firm, direct approach. Toddlers test limits and may have temper tantrums. Power struggles with parents center around toilet training and food.
- Assess status regarding toilet training. Toilet training is a major developmental task for the toddler. Illness or injury may cause regression.
- Give one direction at a time. Toddlers have a short attention span.
- Prepare toddlers with information immediately before procedures. Their sense of time is the immediate present and their sense of distance includes only what they can see.
- Use play to prepare for and explain procedures.
- Provide support and comfort during procedures. Invasive procedures are especially threatening. Use least intrusive approach possible, e.g., axillary temperature, oral medications.
- Loss of control and restriction of movement are very threatening to toddlers.
- Support relationship with parents. A major fear of toddlers is separation from parents.
  - Separation anxiety may be intense.
  - Hospital, strangers, and procedures may cause a terror response.
- Toddlers engage in magical thinking and may perceive machines as living things.
- Risk-prevention
  - Provide a safe environment and supervision. Curiosity, energy, impulsiveness, and lack of inhibition lead to unsafe situations.
  - Protect against infection. Although toddlers form antibodies, they are susceptible to gastrointestinal and respiratory infections in response to new organisms.

Early Childhood.com
(http://www.earlychildhood.com/)
Resource for early childhood issues for parents and teachers. Offers activities, curriculum, arts and crafts, sharing boards and more.

The Activity Idea Place
(http://www.123child.com)
Hosts over 2400 activity ideas for Early Childhood Education professionals.

- Provide for rest and sleep. Toddlers need 10 – 12 hours of sleep nightly and a daytime nap.
- Provide opportunities for solitary play.
- Provide support and comfort. Toddlers have limited ability to think and reason. Will not be consoled by explanations. Their thinking is egocentric and concrete.
- Assess nutritional needs, including food preferences. Growth spurts increase nutritional needs. Iron intake is required to maintain red blood cell levels.

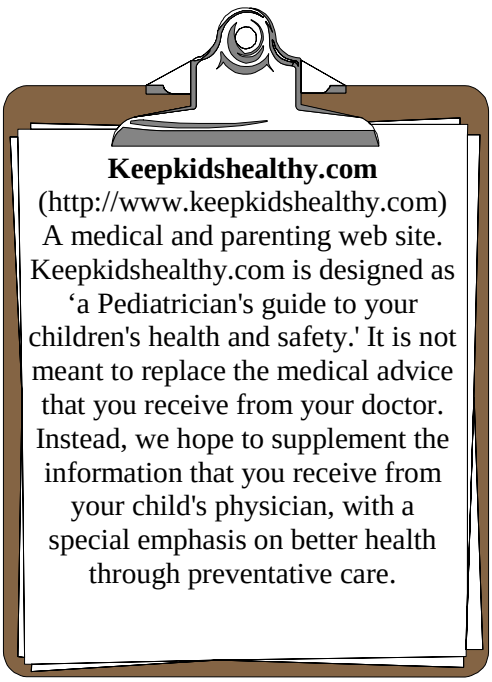
- Assess growth status. Prolonged or serious illness may retard growth.
- Assess carefully. The toddler's ability to describe discomforts is limited.

Preschool Child, ages 3 years to 5 years

- Developmental Task = Initiative versus Guilt
  - The preschooler explores and seeks answers.
  - Set limits to balance exploration with needed limits on behavior.
- The preschooler is at the phallic stage (Freud) and is beginning to explore his own genitalia and develop a sense of sexual identity. Procedures involving the genitalia are especially anxiety producing.
- If appropriate and safe, provide opportunity to interact with other children. The preschooler develops an awareness of others and an ability to participate with a group.
- Offer snacks to meet nutritional needs related to high level of activity. Respect food preferences; often the preschooler prefers texture and separation of foods, rather than mixtures.
- Explain when parents will return. The preschooler has the capacity to understand the concept and finds it comforting.
- Assess the preschooler's interpretation of the hospital environment. Preschoolers engage in magical thinking and may become fearful based upon imagined threats.
- Preserve home rituals and habits to the greatest extent possible.
- Support the preschooler when fearful. Fear of the unknown, the dark, mutilation, bodily injury, and being left alone are prominent.
- Preschoolers can ask for help. They are eager to please and understand simple directions. Older preschoolers exhibit some control over painful experiences and can accept logical reasoning.
- Preschoolers conceptualize death in terms of separation and lack of movement.

School-aged Child, ages 6 years to 12 years

- Developmental Task = Industry versus Inferiority. The school-aged child desires to make things, solve problems, and master tasks. Doing so builds feelings of confidence and prevents feeling of inadequacy.
  - Allow child to participate in care to the greatest extent possible; the child may resent forced dependence.
  - Living up to expectations of others is very important to the school-aged child.
- Give permission to display fear or pain. The school-aged child may attempt to act bravely.
- Educate using play, games, rewards and praise.
- Assure that information and patient education is understood. Ask the child to tell you his understanding. School-aged children have limited understanding of the human body and may be reluctant to admit when they do not understand. Although their thinking is still concrete, literal and specific, they are beginning to develop logical and deductive reasoning. They may view treatments as punishments.
- Include a more mature concept of time in communication. The school-aged child can understand the past and foresee future consequences.



Keepkidshealthy.com
(http://www.keepkidshealthy.com)
A medical and parenting web site. Keepkidshealthy.com is designed as 'a Pediatrician's guide to your children's health and safety.' It is not meant to replace the medical advice that you receive from your doctor. Instead, we hope to supplement the information that you receive from your child's physician, with a special emphasis on better health through preventative care.

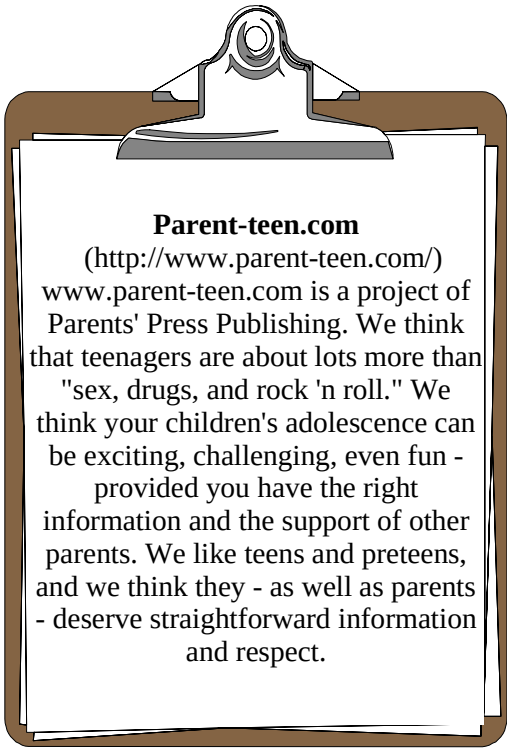
- Death is understood more fully during the school-age years. Early in this stage, the children view death in terms of a dark magical force that would remove them from their parents. Later they view death as a permanent state and by the end of the school-age years have an adult concept of death.
- Offer support in fearful situations. Major fears of the school-aged child include bodily injury, mutilation, separation, and death.
- Ask the child questions as a part of the assessment process. School-aged children can describe their discomforts and perceptions.
- Use least intrusive approach possible, e.g., axillary temperature, oral medications.
- Respect need for privacy.
- Support relationships with friends. School-aged children feel great loyalty and affiliation to same sex friends. Often they prefer socializing with friends over family members.
- School-aged children may question parental authority and rebel against authority figures.
- Assess and provide for nutritional needs. Increasing height, weight, muscle mass and dental development require adequate calories, iron, calcium, and vitamins A and B.

Adolescent, ages 13 years to 18 years

Often subgrouped into:

- ***Young adolescents, ages 13 years to15 years***
- ***Older adolescents, ages 16 years to 18 years***

- Developmental Task = Identity Formation vs. Identity Confusion (Diffusion). Identity includes:
  - Separating from parents and authority figures
  - Developing relationships with the opposite sex
  - Establishing sexual identity
  - Coping with body changes
  - Identifying who they are, where they fit in, and where they are going
- Assess and meet menarche needs (11 – 13 years) in girls. Address other learning needs related to the development of secondary sex characteristics.
- If you work with adolescents, maintain an updated knowledge base about acne causes and treatments. Acne is a major concern for many adolescents. Take the opportunity to provide credible information and resources.
- Assess nutritional needs. Growth spurts last two to three years. Skeletal and body mass double, creating increased need for calories and protein.
- Encourage peer visitation if possible. Peers are critically important to adolescents. In early adolescence same sex friends predominate; later, opposite sex relationships are more important.
- Assess illicit substance use and sexual activity in private
- Risk-prevention
  - Seek follow-up referral or resources if you identify indications of depression or suicidal thoughts. Suicide is the third most frequent cause of death in this age group.
- Provide support, information, and encouragement related to threats to body image. Adolescents are particularly concerned about body image, perceived flaws, and appearing different from their peers. Adolescents may be poorly informed, but reluctant to ask for information.



Parent-teen.com
(http://www.parent-teen.com/)
www.parent-teen.com is a project of Parents' Press Publishing. We think that teenagers are about lots more than "sex, drugs, and rock 'n roll." We think your children's adolescence can be exciting, challenging, even fun - provided you have the right information and the support of other parents. We like teens and preteens, and we think they - as well as parents - deserve straightforward information and respect.

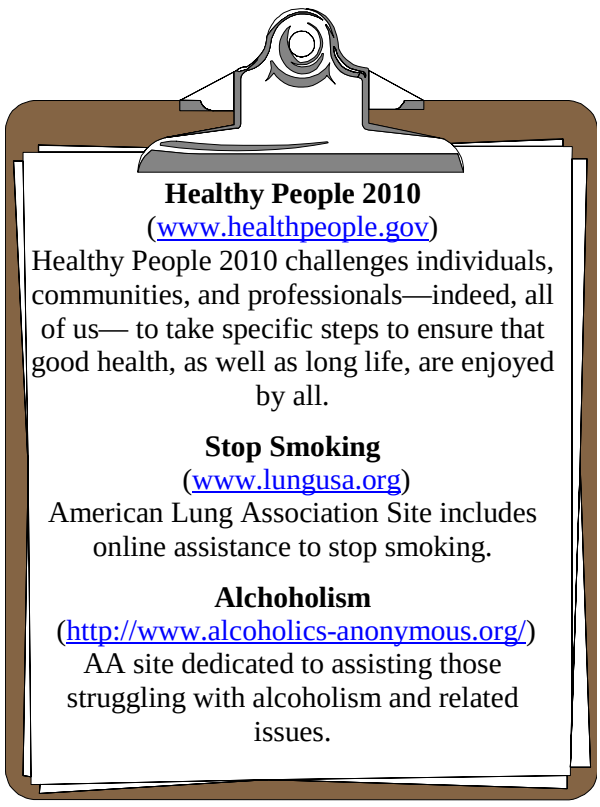
- Expect that many adolescents are emotionally labile. Hormonal changes, peer and parental relationships, and identity adjustments lead to frequently changing emotions. Increased perception of pain may occur as well.

Adult – 19 years and older

Often subgrouped into

- ***Young adults, ages 20 years to 40 years***
  - Developmental Task = Intimacy versus Self-isolation, reaching out and using one's self to enter a committed relationship with another person.
  - Assess developmental stage, especially among young adult patients. In the early years of young adulthood, many may still be resolving adolescent tasks and issues. Yet, others have fully assumed adult roles at home, at work, and in the community.
  - Young adults often face challenges to rearrange childrearing responsibilities during illness, injury, or hospitalization.

- ***Middle-aged adults, ages 40 years to 65 years***
  - Developmental Task = Generativity versus Self-absorption, concern about providing for others is equal to the concern about providing for self; concern about contributing to the next generation and to society.
  - Respect the fact that most middle-aged adults are at the peak of their influence and authority. They may be distressed by forced dependency in the patient role.
  - Middle-aged adults experience changes of aging to varying degrees depending upon the individual. For some individuals these changes are very stressful. Assess to detect risk for:
    - Skin breakdown due to dryness and decreased subcutaneous tissue.
    - Hypertension and hyperlipidemia, which may not be the cause of hospitalization, but may be detected during hospitalization.
    - Sleep apnea
    - Skeletal injury due to diminished bone density and osteoporosis, especially in women
    - Obesity due to decreased basal metabolic rate. Assess and address nutritional needs.



Healthy People 2010
(www.healthpeople.gov)
Healthy People 2010 challenges individuals, communities, and professionals—indeed, all of us— to take specific steps to ensure that good health, as well as long life, are enjoyed by all.

Stop Smoking
(www.lungusa.org)
American Lung Association Site includes online assistance to stop smoking.

Alchoholism
(http://www.alcoholics-anonymous.org/)
AA site dedicated to assisting those struggling with alcoholism and related issues.

Assess middle-aged female patients for menopausal status and distress associated with menopause. Be prepared to offer credible resources related to symptom relief and hormone replacement therapy.

Health teaching for middle-aged adults includes clarifying information about screening tests such as regularly scheduled mammograms and bone density tests for women and prostate-specific antigen (PSA) prostate cancer screening for men.

Presbyopia is likely among middle-aged patients. If the patient does not have reading glasses or magnifiers, assure that any important reading material (such as forms requiring signature, patient education materials, instructions and menu) is printed in a size of type that is legible to the patient, or read the materials aloud for the patient.

Middle-aged persons are in the so-called sandwich generation – sandwiched between responsibilities and concerns related to their children and also to their aging parents. Major tasks during these years include achieving financial and emotional security and preparing for retirement.

For all adults:

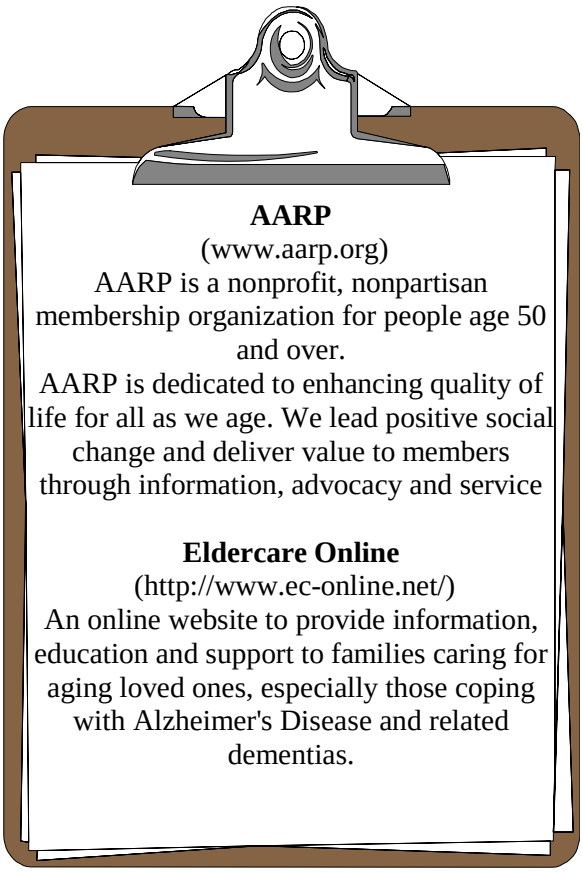
- Provide options for communication and work as appropriate. Assess the patient's physical and cognitive ability to work and communicate with co-workers, family, and friends. Offer encouragement and reassurance as needed to assist the patient in setting realistic achievable goals for communication, work, and other pursuits during hospitalization.
- Assess impact of hospitalization/illness on family, work, and body image.
- Involve spouse or significant other in care.

Most adults are actively involved in work life and in managing their home and family responsibilities. Most adults also engage in some form of hobbies or interests. Hospitalization requires adults to separate from these activities. Some adults make unrealistic plans for a hospital stay – such as accomplishing work, catching up on reading, or corresponding with family and friends. For example, the middle-aged person who undergoes an elective surgical procedure may be frustrated and disappointed to discover that the after effects of anesthesia and the stress of surgery interfere with the ability to concentrate.

- ***Elder (or Later Adult)***
  - Developmental Task = Ego Integrity versus despair, the acceptance of life and of the self as they are.

Most elders experience a series of losses and grieve these losses. Losses include progressive loss of physical capabilities, loss of memory, loss of a spouse, loss of peers, loss of independence, and loss of a sense of relevance. One elder counselor reported that for some of her clients, the loss of the driver's license (and the independence it symbolizes and makes possible) was often as devastating as the loss of the spouse (Williams, 2004).

Traditionally and in much research, the terms elder and elderly have described persons 65 years of age and older. Persons in this age group account for 48% of acute hospital admissions (Mezey, et al., 2001). Since the 1990s, the number of persons older than 65 years has increased and more persons are living into their late 80s,



AARP
(www.aarp.org)
AARP is a nonprofit, nonpartisan membership organization for people age 50 and over.
AARP is dedicated to enhancing quality of life for all as we age. We lead positive social change and deliver value to members through information, advocacy and service

Eldercare Online
(http://www.ec-online.net/)
An online website to provide information, education and support to families caring for aging loved ones, especially those coping with Alzheimer's Disease and related dementias.

90s and even early 100s. Many people postpone retirement, or begin a second career or work life after retiring at age 65. Some experts have redefined elderly to mean people who are 75 years old and older. People within the age group 65 years to 100+ years vary considerably in their physical, motor/sensory, cognitive and psychomotor characteristics, depending in part on age. Some gerontological experts define three groupings within the age group 65 years to 100+ years:

- Young Old, ages 65 years to 75 years
- Old, ages 75 years to 85 years
- Old Old, ages 85 years and older

Routine nursing care procedures create risks for elderly patients to a greater extent than for younger adults. For example:

- IV starts and blood draws are often difficult due to small and fragile veins.
- IV therapy presents the risk of fluid overload. Fluid balance is more delicate with elderly persons. The elderly are particularly vulnerable to dehydration –which may present as confusion.
- Fragile skin is easily torn during tape removal.
- Moving in bed can injure fragile skin.
- Fractures may result from very minor trauma due to osteoporosis.
- Medications present special risks. Because of slowed metabolism, relatively more body fat, compromised renal function, and alterations produced by disease conditions, the elderly are highly sensitive to the effects of drugs. A narrow margin of safety – between minimal effective dose and toxic dose – is often a factor. (See Table on "Medication Safety Risks with Elderly Patients: The Evidence Base" later in this article.)
- Because of their heightened sensitivity to the effects of drugs and the number of drugs they often receive, elders are at risk for potentially serious effects of polypharmacy.

Competencies in the Care of Patients Aged 65 Years and Older
Adapted from The John Hartford Foundation, 2001

Communication

- Carefully assess and validate the need for modified communication techniques.
  - Seek and use resource persons as needed to communicate effectively with the patient who has dementia.
- Communicate respectfully and in a manner that preserves dignity.
  - Ask the patient how he or she prefers to be addressed.
  - Avoid terms such as honey, sweetie, and dear.
- Use communication strategies to meet patients' needs, such as:
  - Speak slowly and at an adequate volume as needed to ensure effective communication.
  - Face the patient, speak slowly and distinctly.
  - Use closed-ended questions requiring only a yes or no response.
  - Communicate one thought at a time.
- Provide adequate time for decision-making and problem-solving.
- Assure participation in decision making: advance directives, health care proxy, DNR, informed consent.
- Assess barriers (drug interactions, dementia, delirium, disease states, depression) that impact patients' understanding of information, following directions and making needs known.
- Demonstrate familiarity with adaptive devices (hearing aid, listenator) and assure the use of needed and applicable communication aids, including glasses or magnifiers.
- Direct instructions/information to family/care partner as well as patient.
- Communicate respectfully and preserve patient dignity when performing physical care as well as when communicating.

Physiological and Psychological Changes Related to Aging

- Intervene to address changes in temperature, BUN and creatinine.
- Assess cognitive status for delirium, dementia and/or depression.
- Use standardized scale to assess:
  - Mental Status (e.g., Mini Mental Status Examination - MMSE) (www.medafile.com/mmes.htm).
  - Delirium (e.g., Confusion Assessment Method - CAM) (www.hartfordign.org/publiccations/trythis/issue13.pdf).
  - Depression (e.g., Geriatric Depression Scale - GDS) (www.healthplace.com/communities/depression/elderly-2.asp).
- Use facility's established criteria for management of polypharmacy.
- Monitor closely for adverse effects of medications related to decreased clearance of drugs.
- Intervene to eliminate or sharply curtail adverse events associated with medications, diagnostic or therapeutic procedures, nosocomial infections or environmental stressors.

Pain

- Assess pain in cognitively impaired patients using valid and reliable self-report instruments and/or observations of patient behaviors (agitation, withdrawal, vocalizations, facial response/grimaces). Assessment and management of pain in cognitively intact older patients is no different than for younger patients.
  - Pain reported by patients over 60 years of age was double that reported by younger patients (Mezey, et al, 2001).
- Intervene for the cognitively impaired when assessment is inconclusive and pain is to be expected.

Skin Integrity

- Assess the risk of skin breakdown using a standardized scale (e.g., Braden Scale) (www.bradenscale.com).
- Use facility's established criteria to implement appropriate bathing, choice of skin products, and positioning.

Functional Status: Overall

- Demonstrate within care plan appropriate intervention to promote function in response to change in activities of daily living (ADL) and instrumental activities of daily living (IADL).
- Assist with activities of daily living as needed.
- Assist the patient in maintaining optimal activity level to prevent de-conditioning with special attention to:
  - Skin.
  - Functionality/Mobility.
  - Continence.
- Use assistive devices and suggest or initiate referral to appropriate therapies (OT, PT, ST) to promote and maintain optimal function.
- Assess need for sleep medication. Monitor carefully for toxic effects and prolonged effect if sleep medication or benzodiazepines are administered.

Functional Status: Urinary Continence

- Identify and refer to appropriate clinician for recent onset of urinary incontinence (UI)
- Document rationale for use of indwelling catheters other than in specified clinical situations (e.g., stage III/IV pressure ulcers, monitored acutely ill patients, urinary retention not manageable by other means).

Functional Status: Nutrition/Hydration

- Use facility's established criteria to identify patients at high risk for nutritional/fluid deficit; assess carefully for swallowing difficulties.
- Intervene to address barriers to nutritional/fluid adequacy (e.g., difficulty with chewing and swallowing, alterations in hunger and thirst, inability to self feed, and capacity of others to feed).
- Assist with meeting nutritional needs related to difficulty chewing, decrease in taste sensation, loss of appetite and decreased absorption of nutrients.

Falls and Injuries

- Use your facility's established falls prevention protocol.
- Assess for postural hypotension and encourage the patient to change position slowly to prevent postural hypotension.
- Use a valid and reliable measure of fall risk assessment.
- Institute fall and injury preventive measures, such as:
  - Ensure that non-slip footwear is worn
  - Maintain toileting programs
  - Maintain an obstacle-free room
  - Keep call bell within reach

Restraints

- Document discussion of the use of a physical restraint (jackets, belts, mitts, chairs with fixed trays, sheets, side rails).
- Document behavior of patient who is physically restrained.
- Intervene to eliminate or sharply curtail the use of physical restraints (e.g. alternate strategies to prevent falls, to prevent treatment interference, and to manage agitated and/or combative behavior).

Elder Abuse

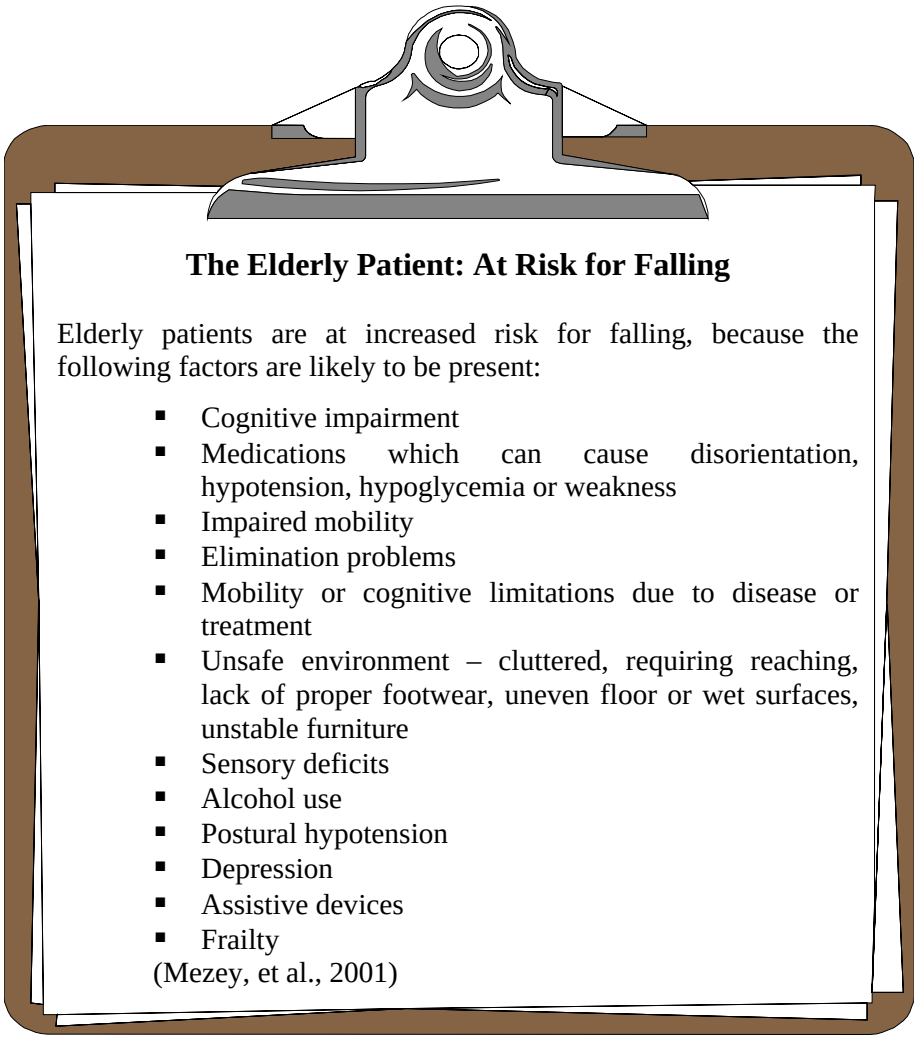
- Use facility's established criteria to identify and report elder abuse.

Discharge Planning

- Transmit timely and complete information to patient/family, home care/ skilled nursing facility (e.g. minimal data elements include diagnoses and medications, including dose and last dose taken)
- Provide patient education materials that are legible, printed clearly, and at appropriate level of medical literacy
- Refer for evaluation of the need for special resources for transition to home (e.g., Meals on Wheels, adaptive devices, and other services)

Falls

Falls present a serious threat to the elderly patient. Elders are at risk for falls for many reasons. In addition, an elderly patient who has fallen previously is at increased risk for falling in the future. Many elderly persons live in fear of falling and for good reason. Among elderly persons, one of seven falls results in a fracture. Elders account for 70% of all persons dying as a result of a fall. Among persons 75 years of age and older who suffer a hip fracture, 50% die within one year (Mezey, et al., 2001).



The Elderly Patient: At Risk for Falling

Elderly patients are at increased risk for falling, because the following factors are likely to be present:

- Cognitive impairment
- Medications which can cause disorientation, hypotension, hypoglycemia or weakness
- Impaired mobility
- Elimination problems
- Mobility or cognitive limitations due to disease or treatment
- Unsafe environment – cluttered, requiring reaching, lack of proper footwear, uneven floor or wet surfaces, unstable furniture
- Sensory deficits
- Alcohol use
- Postural hypotension
- Depression
- Assistive devices
- Frailty

(Mezey, et al., 2001)

Pressure Ulcers

Elders are at increased risk for skin breakdown for many reasons (Mezey, et al., 2001):

- Reduced sensory perception and therefore lack of awareness of early indications of skin damage
- Collection of moisture due to incontinence or other causes
- Dryness of the skin creating fragile skin surfaces
- Limitation of activity including the ability to reposition oneself
- Lack of mobility
- Inadequate nutrition
- Friction and shear during movement and positioning

Inspect the skin thoroughly for evidence of early skin breakdown. If unlicensed assistive personnel (UAP) are providing hygienic care, assure that UAP are trained to observe for early indications of skin breakdown and to institute preventive measures. Avoid the use of extremely hot water for bathing. Keep the skin clean and free of excess moisture. Apply emollients as needed to prevent dryness.

Use of Restraints

Always exhaust all less restrictive means before applying physical restraints. Complications of restraint use include injuries sustained while struggling against the restraint, depression, agitation, confusion, withdrawal, and anger.

Patient and Family Teaching

Elders are often discharged from facilities with complex care and treatment plans. Assure that the patient and appropriate others such as family members and other caregivers are fully informed about care needs and procedures. Place particular emphasis upon the knowledge and skill needed to manage the medication regime. Misuse of drugs is the fifth leading cause of death among elderly persons (Mezey, et al., 2001).

Protecting elderly patients from potential hazards requires careful observation and monitoring, as well as gentle handling.

Medication Safety Risks with Elderly Patients: The Evidence Base

Evidence	***Source***
A typical older adult in the United States takes 4 to 5 prescription and 2 over-the-counter drugs at a time and fills 12 to 17 prescriptions per year	Cusack & Vestal, 2000
In 1998, the elderly and disabled accounted for 80% of prescription drug expenditures in the United States	Reutter, 2003
1/3 of medication errors which reach a patient involve a patient aged 65 years or older 55% of reported errors involved seniors (the 55% includes errors that did not reach the patient). The most common types of medication errors among seniors were: o Omission – 43% o Improper dose/quantity – 18% o Unauthorized drug (drug not prescribed for the patient, distinct from wrong patient) – 11% Among medication errors that caused harm to seniors: o 9.6% resulted from prescribing errors. o 7% resulted from use of the wrong route (e.g. tube feeding given intravenously.) o 6.5% resulted from wrong administration technique (failing to dilute concentrated solution, crushing sustained release medications, administering eye or ear drops incorrectly)	USP, 2003
Elderly persons' risk of hospitalization as a result of adverse drug effects is estimated 17%, six times the risk for younger persons	Nanada, et al., 1990
Studies have identified a lower rate of adverse drug events in long-term care (1.89 per 100 resident-months), but a much higher percentage of preventable events than in acute care settings (50.5%)	Gurwitz, 2000
Elderly persons in nursing homes receive an average of 6 medications per day; over 20% receive more than 10 medications per day	Lombardi & Kennicutt, 2001
RE: Drugs Inappropriate for the Elderly (The Gray List) Elders frequently receive Gray List prescriptions from office-based physicians. 33% of long-term care residents received at least one potentially inappropriate drug 18% of long-term care residents who had no potentially inappropriate drugs prescribed on admission had one prescribed at the facility 40% of nursing home residents received at least one potentially inappropriate drug 21.3% of nursing home residents received at least one potentially inappropriate drug Commonly prescribed inappropriate drugs included: propoxyphene, amitriptyline, long-acting benzodiazepines and dipyridamole Predictors of inappropriate prescribing included: polypharmacy, poor health status, female gender, prescribing location, ethnicity, age and referral status. The most significant risk factor for inappropriate prescribing was the total number of prescription drugs being taken. 50% of elderly persons with painful neuropathies receive inappropriate analgesics. Most frequently propoxyphene followed by amitriptyline and long-acting benzodiazepines.	Aparasu & Fliginger, 1997 Dhall, et al., 2002 Dhall, et al., 2002 Liu & Christiansen 2002 McCarberg in Kerr, 2003

A UNIQUE PACKAGE OF INDIVIDUAL DIFFERENCES

In addition to age-related differences, some of the ways in which individual patients differ from one another include:

- Cultural Practices
- Religious Values, Beliefs and Practices
- Generational Orientation
- Community Affiliations
- Sexual Orientation
- Family Role
- Educational Background
- Social Status
- Economic Status
- Work Role
- Interests and Talents
- Learning Style
- Personality Type
- Diagnosis, Treatment and Prognosis

Age-specific considerations must be combined with any and all other individual differences. For example:

- An adolescent who must adjust to the diagnosis of diabetes might be expected to experience disruptions related to peer relationships that are so important to adolescents. Yet, the findings of one recent study indicated that teenagers with Type I diabetes did not differ from a control group of teens in perceptions of close friendships, physical appearance, social acceptance, and romantic appeal. The teens who had diabetes did express lower life satisfaction and health perception than the control group (Faulkner, 2003).
- Adults who experienced the Great Depression may view health prevention expenses differently from Baby Boomers.
- An older adult may observe specific religious practices that younger persons of the same religion do not observe. Certain practices which older adults learned as children may have changed and been eliminated from the religious education of younger persons.
- An older adult who has AIDS may be affected by age-specific factors such as denial, extreme secrecy, a compromised immune system, and erectile and vaginal changes associated with aging. The drug therapy maxim regarding dosage for older adults: "Start low, go slow" is at odds with the AIDS drug therapy maxim, "Hit early, hit hard." In 2000, 10% of newly diagnosed cases of AIDS were among persons older than 50 years (Linsk, 2000).

The most important thing to remember about individual differences is to avoid stereotyping or assuming that a patient practices certain behaviors or espouses certain values and preferences based upon any category or combination of categories into which that patient appears to fit. Nevertheless, to practice with cultural competence, the nurse learns typical behaviors, values, and preferences associated with various groups. The nurse uses this information to assess and validate whether and how those norms apply to a specific patient.

Even age group norms require validation, particularly among older adults. According to the Two-Thirds Rule often referred to in assessment of elders, most persons of a given age have certain age-related characteristics. For example, a typical 70-year-old might have certain physical, motor/sensory, cognitive and psychomotor characteristics. However, a few 70-year-olds resemble the typical 47-year-old, while a few 70-year-olds resemble the typical 93-year-old. In addition, many 70-year-old individuals fall somewhere between their true chronological age and one of those two extremes.

The competent nurse uses knowledge of typical characteristics and expectations as a guide and a basis for further assessment and validation, not as a basis for making assumptions.

CONCLUSION

As you manage patients in different age groups, keep in mind that there are specific psychologic and physiologic needs. These vary by age group, or by developmental level. By understanding these differences, you can provide more individualized care to your patients.

REFERENCES

American Academy of Pediatrics. (2003). Agency for Healthcare Research and Quality Summit: Setting a research agenda for patient safety. Summary statement by the American Academy of Pediatrics.

Alspach. J. G. (1996). *A framework for assessing age-related competency, Part One: Distinguishing attributes of various age groups*. Pensacola, FL: NNSDO.

Aparasu, R. & Fliginger, S. (1997). Inappropriate medication prescribing for the elderly by office-based physicians. *Annals of Pharmacology, 31*(7-8): 823 – 829.

Case, B. (2004). *Critical thinking: Administering medications to elderly patients*. San Diego: rn.com. Continuing Education Course www.rn.com

Cusack B. & Vestal R. (2000). Clinical pharmacology. *The Merck Manual of geriatrics*, Beers MH and Berkow R.(eds) Whitehouse Station, NJ: Merck Research Laboratories, 54-74.

Dhall, M.S., Larrat, E.P., Lapane, K. (2002). Use of potentially inappropriate drugs in nursing homes. *Pharmacotherapy, 22*(1): 88 – 96.

Faulkner, M. (2003). Quality of life for adolescents with type I diabetes: Parental and youth perspectives. *Pediatric Nursing, 29*(5): 362 – 368.

Gurwitz, J.H., Field, T.S., Avorn, J. et al. (2000). Incidence and preventability of adverse drug events in nursing homes. *American Journal of Medicine, 109*: 87 – 94.

Holdsworth, M.T., Fichtl, R.E., Behta, M., Raisch, D.W., Mendez-Rico, E., Adams, A., Griefer, M., Bostwick, S. & Greenwald, B.M. (2003). Incidence and impact of adverse drug events in pediatric inpatients. *Archives of Pediatric and Adolescent Medicine, 157*: 60 – 65.

John A. Hartford Foundation For Geriatric Nursing (2002). *Competency: Care of the adult age 65 years and older*. New York: New York University, The Steinhardt School of Education, Division of Nursing. Additional resources available at http://www.hartfordign.org

Kerr, M. (October 6, 2003). Half of elderly patients with painful neuropathy receive inappropriate meds. *Medscape Medical News*. Retrieved October 15, 2003 from www.medscape.com

Lamagna, P. & MacPhee, M. (2004). Troubleshooting pediatric peripheral IVs: Phlebitis and infiltration. Nursing Spectrum, 17(13): 14 – 16.

Linsk, N. (2000). HIV among older adults: Age-specific issues in prevention and treatment. *AIDS Reader, 10*(7): 430 – 440.

Liu, G.G. & Christensen, D.B. (2002). The continuing challenge of inappropriate prescribing in the elderly: An update of the evidence. *Journal of the American Pharmaceutical Association, 42*(6): 847 – 857.

Lombardi, T. & Kennicutt, J. (2001). Promotion of a safe medication environment: Focus on the elderly and residents of long-term care facilities. *Medscape Pharmacists*. Retrieved November 13, 2001 from www.medscape.com

Mezey, M., Fulmer, T. & Mariano, C. (2001). *Best practices in care for older adults: Incorporating essential gerontological content into baccalaureate nursing education and staff development, 3rd edition*. New York: Hartford Institute for Geriatric Nursing.

Mezey, M., Fulmer, T., Abraham, I. (Eds); Zwicker, D. (Managing Ed). (2003). *Geriatric nursing protocols for best practice, 2nd Edition*, New York: Springer Publishing Co.

Miller, C. (2003). Safe medication practices: Nursing assessment of medications in older adults. *Geriatric Nursing, 24*(5): 314 – 315, 317.

Moore, T.J., Weiss, S.R., Kaplan, S., Blaisdell, C. (2002). Reported adverse drug events in infants and children under 2 years of age. *Pediatrics, 110*(5).

Nananda, C., Fanale, J. & Kronholm, P. (1990). The role of medication noncompliance and adverse drug reactions in hospitalizations of the elderly. *Archives of Internal Medicine,* 150:841 – 846.

Reutter, M. (August 1, 2003). Increased prescription-drug use by elderly leading to rising costs. News Bureau: University of Illinois at Urbana-Champaign. Retrieved November 5, 2003 from www.news.uiuc.edu/gentips/03/08drugs.html.

Williams, M. (July 12, 2004). Personal communication.

U.S. Pharmacopeia (2003a). USP issues recommendations for preventing medication errors in children. Press release January 21, 2003. Retrieved January 21, 2003 from mediarelations@usp.org.

U.S. Pharmacopeia Press Release (2003b) *USP releases fourth annual report on medication errors in US hospitals*. November 18, 2003 press release. Retrieved November 18, 2003 from mediarelations@usp.org.

POST TEST VIEWING INSTRUCTIONS

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