

Care of the Mature Adult: 65 Years and Older

The healthcare provider will find a wide variation in mental ability, physical ability, and health status in this age group.

- The *age* of the patient does not automatically dictate his or her health status.
- Some *elderly* patients are still quite active, playing golf, swimming, walking, playing tennis, etc.
- Some *elderly* patients are very debilitated due to chronic illnesses, and may require home care or to be in an extended care facility.

Do not stereotype the elderly person...

It is important not to stereotype any person. It is particularly important not to presume that an “elderly” patient is frail, weak, and helpless.

A thorough assessment will help identify the health level of the individual.

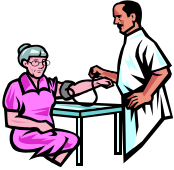
Old age is now further subdivided:

Young-old: 65 to 74 years

Middle-old: 75 to 84 years

Old-old: 85 years and older (the frail elderly)

VITAL SIGNS



Temperature: 97.6°F- 98.6°F (oral/tympanic);
99.6°F (rectal)

Heart Rate: 60-100

Respirations: 12-24

Blood Pressure: (see below)

A reduction in cardiac activity, along with the distribution of fatty deposits along the inner arterial walls can lead to hypertension (high blood pressure) in the mature adult. The following table can be used for other adults to assess for hypertension.

<u>Phase</u>	<u>mmHg</u>	<u>Classification</u>
Systolic	<140	Normal
	140-159	Borderline HTN (hypertension)
	> 160	Systolic HTN
Diastolic	<85	Normal
	85-89	High-normal
	90-104	Mild HTN
	105-114	Moderate HTN
	>115	Severe HTN

1988 Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure.

NERVOUS SYSTEM/COGNITIVE FUNCTION

The mature adult often experiences a slowing of his or her ability to perform tasks. This slowing is due to:

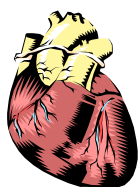
- decreased visual acuity
- hearing loss
- slower motor response to sensory stimulation
- short-term memory loss

REMEMBER...these changes do happen with age, but not every senior experiences them to the same degree. Obviously, older patients with a history of stroke or Alzheimer's disease will appear more disabled than a *healthy* older person.

Like other cells that diminish with advancing age, there is a loss of neurons (nerve cells) and slower nerve conduction due to a decrease in neurotransmitters (the chemicals that help transmit nervous system signals). Sensory and motor functions decrease, causing slowed responses in the mature adults.

Sleep is also affected with age. Generally it takes longer to fall asleep, and the mature adult may awaken frequently. Fatigue from sleep deprivation may occur.

HEART (CARDIOVASCULAR SYSTEM)



- Aging reduces the number, size, and elasticity of cardiac muscle cells.
- The heart valves thicken with age.
- Pacemaker sites can become fibrotic and lead to troublesome or lethal cardiac dysrhythmias.
- The elderly patient may no longer be able to compensate when increased physical demands call for an increase in the heart rate or stronger contractions.

It is important for healthcare providers to understand these changes, to prevent the elderly patient from becoming physically stressed or fatigued, especially during procedures or during physical activities ordered by the physician.

PERIPHERAL VASCULAR SYSTEM

Vein walls thicken and become calcified. There is a loss of elasticity and a reduced ability for the veins to return blood to the heart.

Varicose veins appear as the valves fail, causing blood to pool in the lower extremities. There is a risk of blood clot (thrombus) formation in these patients.

LUNGS

As the spine calcifies, rib cage mobility decreases.

Decreased rib cage mobility reduces vital lung capacity.

Lung tissue elasticity decreases, making breathing more difficult.

Cilia (small hair-like projections along the airways) decrease. These tiny hairs act as filters to catch impurities before they can be inhaled into the lungs. As the number of cilia decreases, impurities can be inhaled, making the mature adult more prone to respiratory infections.

The cough reflex weakens with age, making the mature adult more prone to aspiration.

MUSCULOSKELETAL SYSTEM

- Osteoporosis is a big health problem in older women and men.
- Bones are more susceptible to fractures as they decalcify and become brittle.
- Joints stiffen due to arthritis.
- Loss of muscle mass reduces muscular strength.
- Higher risk for falls.

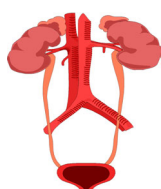
MOBILITY

Impaired mobility places the patient at risk for skin breakdown, falls, and psychological isolation. Patients with mobility problems often have uncontrollable tremors, poor muscular coordination (Parkinson's disease, for example), decreased muscle strength, and balance difficulties.

Healthcare providers must work together (physicians, nurses, physical therapists, nursing assistants, etc.) to provide range-of-motion (ROM) exercises, assistance with ambulation, frequent change of position in bed or in a chair, and prevention of further injury, such as foot drop by the use of a foot board or other supportive device.

BLOOD

- Anemia may occur in the mature adult if the diet is low in iron and other nutrients.
- There is a decrease in lymphocytes, a decrease in antigen-antibody response, and greater risk of infections.



GENITOURINARY SYSTEM

Renal cells, like cardiac cells, decrease with age.

Electrolyte imbalance can occur.

Bladder problems occur (incontinence, infections) in men and women.

As cells decrease in the kidneys, blood filtration lessens. This situation results in less filtration of waste products and a decrease in the clearance of drugs from the blood.

Most drugs are broken down by the liver and excreted by the kidneys. Since kidney function diminishes, the mature adult is at higher risk for developing toxic blood levels as the kidneys fail to remove the drug from the body. Observe mature adult patients for signs of drug toxicity.

The renal tubules reabsorb less sodium, leading to a loss of water and sodium. This situation can cause dehydration in the mature adult.

Bladder muscle tone weakens with age, resulting in incomplete emptying of the bladder and an increased risk of infection. Incontinence is common in women. Men with enlarged prostates can experience frequency and incontinence.

GASTROINTESTINAL SYSTEM

- Loss of teeth and improperly fitted dentures can impair chewing, the first step in the digestive process.
- Sense of smell and taste diminish.
- Peristalsis of the G.I. tract slows.
- A decrease in peristalsis combined with certain medications that further reduce peristalsis (narcotic pain medications, for example) place the mature adult at risk for constipation and fecal impactions.

One of the senses affected by age is the sense of taste. It is believed that the number of taste buds decrease with age. A change in taste sensation can lead to a change in the person's preferred foods list.

Research studies have shown that elderly people tend to lose their taste ability for salty and bitter flavors, while their sensation for sweet and sour changes little. In order for elderly people to taste salt, they need to add more to their food, thus increasing their risk of sodium overload, fluid retention, and congestive heart failure.

Dieticians can be very valuable in assessing the nutritional status of the hospitalized elderly patient. Although it is agreed by medical professionals that elderly patients require less calories due to a reduction in energy levels, the elderly patient still requires a balanced diet of protein, fats, carbohydrates, vitamins, minerals, and water to maintain or improve overall health.

SKIN

- The skin loses elasticity.
- A reduction in fat and collagen causes the skin to wrinkle, become more susceptible to bruising, and to heal more slowly.
- The hair thins in men and women.
- Nails grow more slowly and break more easily.

PAIN ASSESSMENT

- The 5th Vital Sign
- Many *erroneous* beliefs exist about pain in the elderly patient:
 - Pain is just part of growing older.
 - Nerves degenerate, so pain is less acute.
 - If the patient is asleep or occupied, s/he is not in pain.
 - Pain medication is too dangerous for the elderly (just as it is for children).

Many misconceptions exist as to why the mature adult would be placed at risk by analgesic medications, especially the opioid pain relievers. Because of these beliefs, many elderly patients (as well as infants, children, and other adults) suffer pain needlessly. Some erroneous beliefs include the following:

- If the patient does not complain of pain, s/he must not be having any.
- It would take too much pain medication to ease all the aches and pains of an elderly patient, placing him or her at risk for other complications such as falls.
- If the patient is asleep, s/he must not be in pain.

Mature adults tend to underreport pain for several reasons:

- They do not want to bother their caregiver (who is so busy with other duties...especially family caregivers).

- They come from a generation that learned to “grin and bear it” or to “suffer in silence.”
- They expect to have pain with aging (as does everyone else) and they do not want to be taking pain medications all the time.

TYPES OF PAIN

Elderly patients can experience acute pain (fractured bones, joint and tendon pain from strains and sprains, and postoperative surgical pain). They also experience pain from cancer, and degenerative conditions such as spinal compression fractures.

Chronic pain is also present in the elderly population. Pain from arthritis, osteoporosis, and peripheral vascular disease can cause significant suffering

PAIN ASSESSMENT & MANAGEMENT

Approximately 50% of hospital beds are filled with mature adults. Many of these patients have been admitted for reasons that cause acute pain, i.e., surgery, bone fractures, etc. It is imperative for healthcare providers to provide optimal pain management interventions to ease their suffering.

Many studies have shown that pain management can:

- Improve patient outcomes
- Reduce length of stay
- Reduce healthcare costs in the elderly population

Self-reporting is the best way to assess pain in the elderly. Most alert patients can use the 0-10 pain scale. For cognitively impaired patients, observation of behaviors, similar to that in neonates, can be helpful to accurately assess the patient’s pain level. Hurley et al. (1992) recommends a 5-minute observation period to assess for facial frowning (wrinkled forehead), restlessness, absence of movement, guarding, generalized tension, moaning, groaning, etc. In a patient who cannot

verbalize his or her pain level, the nurse, physician, or other healthcare professional can objectively determine that a patient is in pain.

Pain assessment must be considered as the 5th vital sign. Whenever vital signs are scheduled, nurses must also assess the patient's pain level.

Using the nursing process, assess the patient's pain by use of a standardized pain scale (subjective data). Have the pain scale interpreted in the languages most often encountered at your institution. Preprinted multi-cultural pain scales are commercially available.

Observe the patient for behaviors that support the patient's report of pain (grimacing, posturing, etc.) and document as objective data.

Plan an appropriate intervention or interventions to ease the pain.

Provide appropriate interventions (pain medication, change in position, pillows, etc.)

Evaluate and document the results of the intervention(s), and provide additional interventions as needed until the patient reports a significantly lower pain level, or the patient is resting comfortably without behavioral evidence of pain.

COMMON FEARS AND STRESSORS

- Declining health
- Loss of independence
- Increased dependence on others
- Social Isolation/loneliness
- Due to death of spouse/significant other, friends, other family members, and in some cases...their older children.
- Injuries (slips, falls, auto accidents)

Elderly individuals commonly have experienced the loss of life-partners, relatives, friends, and sometimes their children. Some may experience social isolation if their families do not live locally, or they have lost contact with friends from work after retirement.

Some of the chronic illnesses that can be seen in this age group include:

- Arthritis
- Heart disease
- Acute and chronic respiratory problems
- Hypertension
- Diabetes
- Visual and hearing loss
- Osteoporosis leading to bone fractures
- Thinning of the skin, with increased risk of dermal injury and infection

PSYCHOSOCIAL GROWTH AND DEVELOPMENT

The 8th stage of development is called integrity vs. despair. When the developmental goals are met, the older adult experiences a sense of ego integrity and peace. When the goals are not met, the person experiences despair, regrets, and disdain (a malignant maladaptive state).

The important event during the 8th stage of life is the reflection on and the acceptance of one's life. *"To be, through having been, to face not being."*

Significant relations during this, the final stage of development are *humankind* itself.

Positive Outcome (Integrity)

This final stage of life is referred to as old age, maturity, late adulthood, and the geriatric stage of development. The mature adult successfully masters this stage of development when s/he

feels a sense of success and ego integrity with a minimal amount of despair and regret.

The adult who achieves *ego integrity* comes to terms with life as well as the end of life. Depending on life experiences, some people achieve this stage easier than others. Life achievements, mistakes, relationships, decisions, etc. are looked upon as having made the person s/he is in the present. Though some thoughts of regret may occur from time to time, the mature adult generally accepts life as it was, is, and will be.

Negative Outcome (Despair)

Mature adults who must deal with failing physical and mental health can become riddled with *despair*. Compounded by regrets from the past, they are faced with the harsh realities of the loss of loved ones, segregation from family and friends, and fear of losing their independence.

As they focus on negative feelings, these adults may become depressed, spiteful, paranoid, or focus on imaginary physical problems. They become hypochondriacs to gain attention. Erikson describes the maladaptive extreme of *disdain* when the mature adult develops contempt for his or her life, as well as the lives of others.

MATURE ADULT SAFETY ISSUES

- Falls
- Hypotension
- Dizziness
- Unsafe home environment
- Loose carpets
- Slippery tubs, showers and bathroom floors
- Stairs
- Bone Fractures
 - Osteoporosis



ELDER ABUSE AND NEGLECT

- 2.1 million seniors are abused each year
- Most abuse is at the hands of relatives or caregivers
- Caregivers who are stressed, angry, or financially challenged may turn against an older person who is dependent upon them.
- Abuse can be physical, emotional, neglect, or financial.

POLYPHARMACY IN THE ELDERLY

- Polypharmacy is prescription, administration, and use of more medication than is clinically indicated.
- People over the age of 65 = 12% of the U.S. population
- The FDA estimates that:
 - 30% of all prescription drugs go to this population
 - 40% of all over-the-counter medications go to this population.
- The mature adult is at risk for *polypharmacy* due to multiple health problems the patient may experience.
- All healthcare providers should be alert for polypharmacy in elderly patients.



MATURE ADULT PATIENT/FAMILY EDUCATION

- Home care may be given to the elderly patient by an elderly spouse of significant other.
- Assess the cognitive level of the patient and family and instruct them appropriately.
- Give clear verbal and written instructions at the time of discharge, and ask the patient and/or caregiver to repeat the instructions.
- Written instructions may have to be printed large for an elderly patient who is visually impaired.

- Begin discharge teaching early in the course of the hospitalization so it is not rushed 5 minutes before the patient leaves the facility.
- One of the most important aspects of patient care is patient and family teaching. In our incredibly busy healthcare environment, it is easy to lose site of the absolute necessity of preparing the patient and caregivers for continued care at home. It is a serious mistake, with the possibility of serious outcomes, to *presume* that the patient or significant other has a clear understanding to safely handle the healthcare problem at home.
- Discharge teaching should ensure that the patient (and caregiver):
 - Understands the illness
 - Complies with drug therapy
 - Carefully follows the recommended diet
 - Manages activity level
 - Understands treatments
 - Recognizes the need for rest
 - Knows about possible complications
 - Knows when to seek follow-up care and when to call the doctor or 911.
- Caregivers of elderly, confused patients should be instructed that *they*, not the patient, are responsible for the safe administration of medications and the monitoring of medication effects. Since we rely on medications as a major component of patient care, it is important that we make certain the medications offer the best chance of a beneficial patient outcome and are not the cause of further illness or injury.