

## Myths of Aging

Kristen L. Mauk, PhD RN CRRN-A APRN BC

By the year 2030, approximately 20% of the U.S. population (71 million people) will be over the age of 65 years (Centers for Disease Control and Prevention and the Merck Company Foundation, 2007). Despite this current trend in aging, relatively few healthcare professionals are prepared with the expert knowledge necessary for caring for older adults. The purpose of this article is to discuss five common myths about aging that affect rehabilitation nursing. Readers are encouraged to take the quiz in **Table 1** and review this article for findings to apply to rehabilitation nursing practice.

### Aging Is Universal but Highly Individual

Although aging happens to all humans, the rate and extent to which the body ages varies greatly in different people. Common changes associated with aging are most pronounced in those over age 85 (Smith & Cotter, 2008). Amella stated that “to inadequately trained clinicians, some normal aspects of aging can appear as manifestations of disease while other changes can mask early signs of illness” (2004, p. 42). Dispelling some of the myths of aging can help rehabilitation nurses recognize common potential problems.

Normal aging changes include loss of subcutaneous tissue, which leads to thinning skin, loss of elasticity and wrinkles; high-frequency pitch hearing loss; decreased cardiac output; less efficient exchange of oxygen; increased constipation; decreased renal blood flow; loss of muscle mass and strength; changes in sleep patterns; a decline in cell-mediated immunity; and diminished sex hormones. But how do the less obvious changes often seen in older adults, such as dehydration, incontinence, and delirium, affect care? How do rehabilitation nurses distinguish between myth and reality when dealing with these conditions?

### Myth or Reality?

#### **Myth 1: Confusion and delirium are normal parts of aging.**

Acute confusion should never be considered a normal part of aging. It is common in hospitalized older adults, with an incidence (acute onset) of 10%–40%, and more often associated with hip surgery and admission to an intensive care unit (Tullman, Mion, Fletcher, & Foreman, 2008). Often, sudden onset of confusion is related to medication side effects. The more medications a person takes, the greater the risk for adverse reactions (Charles & Lehman, 2006). Any change in mental status in older adults should be investigated. Common culprits are drug-drug interactions, adverse drug reactions, dehydration, infection, and metabolic imbalances (Amella, 2004). Delirium is generally reversible when the cause of it is properly evaluated and treated.

#### **Myth 2: The body’s reaction to medication is relatively constant.**

There are several changes that normally occur with aging that significantly affect how the body reacts to medications. Polypharmacy, or the use of multiple medications, is a growing problem among older adults. In addition to possible drug-drug or drug-food interactions with multiple medication use, the aging body experiences changes in absorption, distribution, and renal clearance. One way to understand these changes is to think of the body as slowing down and becoming less efficient with age. Absorption is slower, medication distribution changes due to an increase in adipose tissue, low albumin levels can affect protein-binding drugs

(such as Warfarin)—causing adverse reactions (such as an increased risk for bleeding)—and less effective kidney function means that clearance and excretion of drugs is slower (Amella, 2004; Plahuta & Hamrick-King, 2006). The combined effect of these normal aging changes may cause drugs to stay in the body longer and older adults may be at higher risk for adverse reactions. The adage “start low and go slow” is particularly important when dosing medications for older adults. Observing for side effects is essential when any new medication is added or there is a change in dosing. Monitoring renal function and creatinine clearance is needed for those with impaired kidney function.

#### **Myth 3: Falling is normal with advanced age.**

Although the incidence of falls does increase with age, falls should never be considered a normal part of aging. A change in functional status, including falls, is often a nonspecific sign of one of many acute illnesses in older adults (Reuben et al., 2004). The circumstances of a fall should always be investigated. Rehabilitation nurses are generally observant of functional status and quick to detect a change in mobility. The timed up-and-go test is a relatively simple way to assess balance and gait. Have the patient sit in a chair, then instruct him or her to rise, walk to a mark 10 feet away, turn around, and return to the chair and sit down. A normal test should take 20 seconds or less and correlates with greater independence in daily activities; anything longer than 30 seconds has been correlated with higher dependence and use of assistance (Shumway-Cook, Brauer & Woollacott, 2000). Further investigation of a person’s functional status and gait can lead the rehabilitation nurse to clues that may head off potential problems when detected early.

#### **Myth 4: Because older adults drink less fluids, it is natural that they should be dehydrated.**

Although an altered thirst mechanism may cause older adults to drink less fluids than younger adults (Plahuta & Hamrick-King, 2006), dehydration is not a normal part of aging. Dehydration is common among older adults, but is a condition that needs to be treated promptly and aggressively because it can quickly lead to mental status changes and electrolyte imbalance and, subsequently, more serious complications. A history should be taken to determine the causes of dehydration, which can be acute (such as from vomiting and diarrhea) or chronic (such as in nursing home patients with dementia who are unable to take fluids independently). Mucous membranes should be checked, along with skin turgor, urine color and concentration, sodium levels, and other appropriate lab values (Amella, 2004).

#### **Myth 5: Urinary incontinence is considered a normal part of aging.**


Although urinary incontinence (UI) occurs more frequently among older adults (10%–42% of hospitalized elders), it is not considered a normal part of aging and is highly treatable (Dowling-Castronovo & Bradway, 2008). A new onset of UI can signal problems such as urinary tract infection, electrolyte imbalances, mobility limitations, or medication side effects. Before beginning any rehabilitative interventions for incontinence, all possible causes should be investigated to rule out reversible factors. Bladder retraining for those with urge or stress incontinence is still highly effective for older adults. Behavioral management is the first line of treatment for UI (Cowley, Diebold, Gross & Hardin-Fanning, 2006).

In summary, by dispelling some common myths of aging and realizing that older adults may present with atypical symptoms of illness or disease, rehabilitation nurses can better prepare themselves to provide excellent care to the elderly.

## References

- Amella, E. J. (2004). Presentation of illness in older adults. *American Journal of Nursing*, 104(10), 40–51.
- Centers for Disease Control and Prevention and the Merck Company Foundation. (2007). *The state of aging and health in America*. Whitehouse Station, NJ: The Merck Company Foundation.
- Charles, C. V., & Lehman, C. A. (2006). Medications and lab values. In K. L. Mauk (Ed.), *Gerontological nursing: Competencies for care* (pp. 265–292). Sudbury, MA: Jones and Bartlett Publishers.
- Cowley, J. B., Diebold, C. M., Gross, J. C., & Hardin-Fanning, F. (2006). Management of common problems. In K. L. Mauk (Ed.), *Gerontological nursing: Competencies for care* (pp. 475–562). Sudbury, MA: Jones and Bartlett Publishers.
- Dowling-Castronovo, A. & Bradway, C. (2008). *Nursing standard of practice: Urinary incontinence (UI) in older adults admitted to acute care*. Retrieved on April 15, 2008, from [http://consultgerirn.org/topics/urinary\\_incontinence/want\\_to\\_know\\_more](http://consultgerirn.org/topics/urinary_incontinence/want_to_know_more).
- Plahuta, J. M., & Hamrick-King, J. (2006). Review of the aging of physiological systems. In K. L. Mauk (Ed.), *Gerontological nursing: Competencies for care* (pp. 143–264). Sudbury, MA: Jones and Bartlett Publishers.
- Reuben, D. B., Herr, K. A., Pacala, J. T., Pollock, B. G., Potter, J. F., & Semla, T. P. (2004). *Geriatrics at your fingertips*. Malden, MA: American Geriatrics Society.
- Shumway-Cook, A., Brauer, S., & Woollacott, M. (2000). Predicting the probability for falls in community-dwelling older adults using the timed up and go test. *Physical Therapy*, 80(9), 896–903.
- Smith, C. M., & Cotter, V. (2008). *Normal aging changes: Nursing standard of practice protocol: Age-related changes in health*. Retrieved on April 14, 2008, from [http://consultgerirn.org/topics/normal\\_aging\\_changes/want\\_to\\_know\\_more](http://consultgerirn.org/topics/normal_aging_changes/want_to_know_more).

Tullman, D. F., Mion, L. C., Fletcher, K., & Foreman, M. D. (2008). *Nursing standard of practice protocol: Delirium: Prevention, early recognition, and treatment*. Retrieved on April 15, 2008, from [http://consultgerirn.org/topics/delirium/want\\_to\\_know\\_more](http://consultgerirn.org/topics/delirium/want_to_know_more).

Kristen L. Mauk, PhD RN CRRN-A APRN BC, is an associate professor of nursing and Kreft Chair for the Advancement of Nursing Science at Valparaiso University in Valparaiso, IN. 

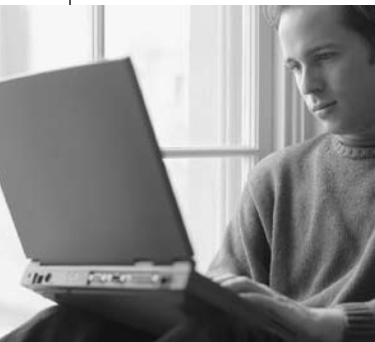
## Table 1 Myths of Aging Quiz.

Answer **true** or **false** to each statement.

1. Polypharmacy can lead to a change in mental status.
2. Aging is a universal phenomenon.
3. Older adults may present with atypical symptoms that complicate diagnosis.
4. The body's reaction to changes in medications remains constant with advancing age.
5. If the rehabilitation nurse observes a sudden change in mental status in an older adult, medication side effects should be investigated as a likely cause.
6. Primary causes of delirium in older adults include medications, dehydration, and infection.
7. Dehydration is not common in older adults.
8. Older adults experiencing a decline in daily function will show no benefit from early rehabilitation.
9. A decline in functional ability for a person residing in a long-term care facility may indicate the onset of a new illness.
10. Urinary incontinence is so common in older adults that it is considered a normal part of aging.

Answers:

1. True; 2. True; 3. True; 4. False; 5. True; 6. True; 7. True; 8. False; 9. False; 10. False



**Don't Miss the ARN  
Webcast June 17, 2008,  
2 pm (EST)**

### *Documenting Evidence of Rehabilitation Nursing: Strategies to Avoid Medicare Denials*

Join us for a Webcast for rehabilitation nurses and others responsible for documentation and coding for patient billing. Rehabilitation nurses play a critical role in providing quality care to the rehabilitation patient. Equally important is documenting those rehabilitation nursing interventions to demonstrate medical necessity and ensure Medicare reimbursement.

**For more information and to register, visit [www.rehabnurse.org](http://www.rehabnurse.org) or call ARN at 800/229-7530.**

The **DCH HEALTH SYSTEM** is a not-for-profit, community owned group of hospitals and health services located in West Central Alabama. We are pleased to be the **FIRST** system in the state of Alabama and only one of four systems nationwide to receive the **EMPLOYER OF CHOICE** award. This national honor recognizes superior dedication to employees through programs such as career flexibility, compensation and benefits.

We currently have an opportunity available for  
**REHAB NURSE MANAGER**

**Our Comprehensive Rehabilitation Pavilion is a 42-bed in-patient unit. This position will manage over 50+ staff members. Must have two years previous management experience performing duties as a Nurse Manager, Assistant Nurse Manager or comparable experience. Rehab nursing, CCRN and BSN is preferred. Must be a Registered Nurse with a current Alabama License.**

**\$\$\$ RELOCATION ASSISTANCE AVAILABLE \$\$\$**

Please contact: Susie Hyde, Director of Employment/Recruitment  
809 University Blvd East, Tuscaloosa, AL 35453  
1-800-552-5163 or 205-759-7284  
email: [shyde@dchsystem](mailto:shyde@dchsystem)

