The diagnosis of cancer is a significant and often overwhelming event. Older adults may have age-related physical and cognitive changes in addition to the stresses of cancer diagnosis and treatment. The combination can present significant barriers to learning readiness in older adults who choose chemotherapy. Older adults receiving chemotherapy need to learn self-care for risks such as neutropenia; however, patient teaching materials typically are not developed with consideration for this group of learners. This article reviews the current literature on effective chemotherapy patient education, the physical and cognitive changes related to aging learners, and strategies appropriate for teaching older adults. As described in this article, best practices were synthesized from the literature, and educational materials for teaching basic chemotherapy safety practices to older adults were developed. The materials then were pilot tested with a select group of older adults receiving chemotherapy, and their feedback was incorporated into recommendations for future research and practice.

### Development of Patient Education for Older Adults Receiving Chemotherapy

**Ann Shields Rigdon, MS, RN, OCN®**

**At a Glance**

- Cancer affects a disproportional number of older adults, yet teaching materials typically are developed to meet the needs of younger individuals.
- Because myelosuppression and other side effects of chemotherapy may be life threatening, effective teaching materials are important for patient safety.
- The existing body of research regarding the physical and cognitive changes associated with aging can assist oncology nurses in designing and delivering effective chemotherapy teaching to older adults.

Chemotherapy is a mainstay of oncology and presents incredible opportunities for cure, but it also poses potentially life-threatening risks to patients. For nurses administering chemotherapy, one of the most important responsibilities is the education of patients regarding side-effect management and appropriate responses to conditions during chemotherapy. In this teaching role, nurses must facilitate effective knowledge transfer for patient safety.

### Background

More than 40% of people in the United States will be diagnosed with cancer in their lifetimes (National Cancer Institute, 2010). Physical changes associated with aging can make older adults more prone to developing cancer; more than 57% of all cancers occur in those older than 65 years (Itano & Taoka, 2005). Almost two-thirds of cancer-related deaths occur in that age group; the higher mortality rates are believed to result from concurrent disease states and decreased tolerance of the myelosuppressive effects of chemotherapy (Hood, 2003). Cancer affects a disproportional number of older adults, and treatment with chemotherapy is increasingly dangerous in that population, yet “most health educational formats are developed on the basis of younger individuals’ preferences and abilities” (Thomas, 2007, p. 46). Because myelosuppression is life threatening, effective patient education materials that consider the physical and cognitive changes associated with aging are important to patient safety.

Manufacturers of chemotherapy drugs usually provide brochures to educate patients regarding side effects and management of problems likely to occur as consequences of chemotherapy. Although the brochures and pamphlets often are informative, they are not customized for older adults. In addition, they are specialized by drug, but patients often receive multiple drugs and therefore need numerous brochures to receive all of the important information regarding their therapy. Multiple resources can lead to contradictory advice and create more confusion than assistance for older adults.

The purpose of the project described in this article was to apply the principles of effective chemotherapy education...