Concept Application: # 3 – Urinary Tract Infections in Older People

**Definition:** Urinary tract infection (UTI) is one of the most common bacteria infections that occur when microbial pathogens are present within the urinary tract.

**Signs and Symptoms:** The typical signs and symptoms of an UTI include irritative voiding, frequency, dysuria, burning sensation, urgency, back pain, hematuria, cloudy or foul-smelled urine, unusually strong urine, nausea and vomiting, onset of enuresis, and fever and chill. The atypical signs and symptoms of UTI in older people include change of mental status, change of behavior, not feeling well, falls, new or worsened confusion, new or worsened urinary incontinence, and functional decline.

**Etiology:** Most often cause of UTI in older people is *Escherichia coli* (*E. coli*). It can be caused by other different organisms, such as

**Incidence:** The incidence of UTI in older people is high in older people in both community setting and nursing home. The prevalence of bacteriuria in women is 20% between ages 65 and 75, and increased to 20 to 50% over the age of 80. In men, it is 3% at age 65-70 and about 20% at age over 80-year-old.


**Implication for APN:** Accurate diagnosis, proper treatment is important to prevent the possible complications of UTI in older people. Teach patient and family proper hygiene and diet to prevent recurrent UTI in the elderly.
Concept Application: # 3 – Health Care of Patient with Dementia


Engelman, K. K., Mathews, R. M., & Altus, D. E. (2002). Restoring dressing independence in persons with Alzheimer’s disease: A pilot study. *American Journal of Alzheimer’s Disease and Other Dementia, 17*(1), 37-43. This article has found out that the training workshop for the certified nursing assistants can be used to increase dressing independence and range of motions of persons with dementia.

Etsuko, T. & Katsuko, K. (2007). Effects of reminiscence group in elderly people with Alzheimer disease and vascular dementia in a community setting. *Geriatrics and Gerontology International, 7*(2), 167-173. This study shows that reminiscence group program maybe necessary to maintain capacity in the older people with dementia. The outcomes were measured as the daily living activities, such as self-care, disorientation, depression, irritability, withdrawal by using the Multi-dimensional Observation Scale for Elderly Subjects.

behavioral and psychological symptoms in patient with dementia, which affect the health care for people with dementia.

Wells, D. L., & Dawson, P. (2000). Description of retained abilities in older persons with dementia. *Research in Nursing & Health, 23*(2), 158-166. This study explores the abilities retained in the persons with dementia by from data collected in four areas, such as self-care, social, interactional, and interpretive. It shows that it is necessary to provide an individualized, abilities-focus approach for the care the persons with dementia.

Wells, D. L., & Dawson, P. (2002). A framework for developing nursing knowledge about the effect of dementia on older person’s abilities. *Journal of Applied Gerontology, 21*(1), 90-102. In this article, a framework that directs the development of nursing knowledge about the effect of dementia on the older people’s abilities is developed. The self-care abilities are illustrated by using the framework.

**Concept Application: # 3 – Health Care of Older Patients with UTI**


This article provides the evidences of health care for the older adults residents with infection at the long-term care facilities.


Woodford, H. J., & George, J. (2009). Diagnosis and management of urinary tract infection in hospitalized old people. *Journal of American Geriatrics Society, 57*(1), 107-114. The study shows that about 40% of cases were incorrectly diagnosed as UTI, and it is ineffective to diagnose UTI in the older patients based on the presence of urinary tract symptoms.