

HEALTH PROBLEMS (4 Contact Hours Each)

Cancer in the Elderly, Jeannine M. Brant, RN, MS, AOCN
Oncology Clinical Nurse Specialist and Pain Consultant

Description: This module will present an overview of cancer in the elderly population including:

- cancer screening recommendations,
- a description of the types of cancer that are most prevalent in the elderly,
- various treatment modalities for each type of cancer including chemotherapy, radiation therapy, and biotherapy,
- common toxicities that elderly patients encounter,
- side effect management recommendations for treatment toxicity.

Objectives:

- Describe the increasing incidence of cancer in the elderly.
- List the American Cancer Society cancer screening and assessment recommendations for breast, cervical, prostate, and colorectal cancer.
- Discuss quality of life considerations for elderly patients diagnosed with cancer.
- Describe the most prevalent types of cancer in the elderly population, prevention strategies when implicated, presentation differences in the elderly, and treatment implications for the following cancers:
 - Cancer of the lung and bronchus
 - Colorectal cancer
 - Prostate cancer
 - Breast cancer
 - Gynecologic cancers
 - Non-Hodgkin's lymphoma
 - Leukemia
- Synthesize treatment considerations in the elderly pertaining to planned dose on time therapy.
- List common complications related to cancer treatment and the disease itself and strategies to manage these side effects of cancer treatment including:
 - Neutropenia, Anemia, Thrombocytopenia
 - Fatigue
 - Nausea and vomiting
 - Mucositis
 - Diarrhea and constipation
 - Organ toxicities
 - Dyspnea
 - Pain

Cardiovascular Disorders and Aging, Larry A. Dent, Pharm D, BCPS

Department of Pharmacy Practice, The University of Montana

Description: This module presents an overview of the epidemiology, associated risk factors, and strategies for prevention of cardiovascular disease. The pathophysiology, clinical presentation, and treatment of hypertension, dyslipidemia, metabolic syndrome, and ischemic heart disease are discussed.

Objectives:

- List incidence and prevalence of cardiovascular disease in older Americans. Identify risk factors associated with the development of cardiovascular disease.
- Describe the importance of lifestyle modifications in the prevention of cardiovascular disease.
- Describe pathophysiological mechanisms of atherosclerosis, hypertension, dyslipidemia, metabolic syndrome, and ischemic heart disease.
- Identify the clinical presentation of hypertension, dyslipidemia, metabolic syndrome, and ischemic heart disease.
- Describe interventions including prevention, non-pharmacologic therapy, and pharmacotherapy for cardiovascular disease
- Identify potential complications associated with pharmacotherapy of cardiovascular disease.
- Describe appropriate care for geriatric patients as a member of an interdisciplinary team responsible for management of geriatric patients with cardiovascular disease.

Central Nervous System and Sensory Dysfunction in Older Persons, Chad O'Lynn, PhD, RN, CNRN

Description: This module will present normal changes in the central nervous system associated with aging, as well as common changes in vision and hearing. Pathological disorders will be presented in an overview fashion, with a focus on recognition of typical signs and symptoms, interventions and treatment, neurological rehabilitation, promotion of optimal independence and safety, prophylaxis, and interdisciplinary case management. When appropriate, cultural considerations will be addressed. Specific prototype illnesses will be presented to provide a foundation for nervous system dysfunction in the elderly. These illnesses include:

- Presbycusis
- Glaucoma
- Stroke

Objectives:

- summarize normal changes associated with aging of the central nervous system, and with vision and hearing;
- summarize pathophysiological mechanisms of neurological disorders commonly seen in older persons;
- identify acute neurological signs and symptoms which may need acute intervention; describe pharmacological strategies for treatment and prophylaxis of neurological and sensory dysfunction;

- analyze potential complications in optimal functional status when using neurological medications;
- summarize basic principles of neurological rehabilitation;
- describe potential detriments to quality of life associated with vision or hearing loss;
- describe potential cultural differences when working with elders with neurological and/or sensory dysfunction;
- synthesize knowledge of geriatric care and nervous system dysfunction in planning an interdisciplinary approach to care for older persons with nervous system dysfunction.

Endocrine Disorders and Aging, Betty J. Mullette, MSN, RN

Description: This module will present common definitions of endocrine disorders, specifically pertaining to diabetes and thyroid disorders. Common health screens for these disorders, ethnic and cultural influences pertinent to the disorders, screening and/or assessment tools, and an overview of prevention strategies will be included.

Objectives:

- Ascertain the incidence and prevalence of diabetes in Montana.
- Distinguish differences between Type 1 and Type 2 diabetes, hypo/hyperthyroidism and other hormonal changes in the aging population.
- Describe common assessment criteria used to diagnose diabetes and hypo/hyperthyroidism.
- Describe non-pharmacologic (nursing, dietary, rehabilitation, pharmacy, medicine, psychology, social work) interventions for endocrine disorders.-60 minutes
- Contrast pharmacologic interventions for diabetes, explaining the current rationale for their use.
- Summarize how health care practices for endocrine disorders may be affected by ethnic or rural issues.
- Apply these health promotion practices in his/her professional setting.

Mental Health Problems in Aging, Ann Williams, PhD, PT

Adjunct Professor, School of Physical Therapy & Rehabilitation Science, The University of Montana

Description: This four hour module focuses on common mental health problems in the elderly, including cognitive disorders, mood disorders, sleep disturbances and substance abuse. Written lecture materials, written assignments, web based resources, reflective and discussion questions guide the learning process. An opportunity to explore personal attitudes toward mental health problems and the elderly is provided. Etiology, symptoms/characteristics, interventions, treatment and caring strategies related to mental health problems in the elderly are addressed. Approaches to alter disruptive behaviors are identified. Mental health challenges of caring for elderly in community settings are discussed. Various resources for information on mental health of the elderly are introduced. Interdisciplinary collaboration is emphasized.

Objectives:

- Discuss various factors commonly affecting mental health of the elderly.
- Discuss ethical-legal-medical issues involved in care of the elderly.
- Examine origins of personal feelings, reactions, attitudes and stereotypes of mental health in the elderly.
- Explore personal and cultural beliefs of aging and mental health.
- Discuss social, cultural, emotional and physiological factors that influence communication with elderly who have mental health problems.
- Describe symptoms/characteristics of cognitive, mood, sleep and substance abuse disorders in the elderly.
- Describe risks factors for suicide in the elderly.
- Compare and contrast delirium, dementia and depression.
- Examine interventions and treatment approaches to responding to common mental health problems in the elderly.
- Describe challenges of meeting mental health need of elderly in the community. 15 min
- Explore interdisciplinary approaches to care and treatment of the mental health needs of the elderly.
- Use web-based resources to access information about mental health research/programs/services for the elderly.

Musculoskeletal Health Problems and Aging, Celeste Peterson, M.D.

Description: This module will aid the student in understanding three of the most common musculoskeletal problems facing the geriatric population. These 3 are osteoporosis, osteoarthritis and falls in the elderly. After completing each section, the student should understand the pathophysiology of the disease, risk factors associated with it, how to prevent and diagnose the illness, and be comfortable with the treatment options available.

Objectives:

- Understand the pathogenesis of osteoporosis and explain the causes of osteoporosis.
- Differentiate risk factors for osteoporosis and osteoporotic fractures.
- Be able to list at least 5 diseases which cause secondary osteoporosis.
- List 3 ways to prevent osteoporosis.
- Know the general screening guidelines and Medicare's criteria for reimbursement. List 4 modes of diagnosis. Know which mode is preferred and why.
- List the 4 most common medications for osteoporosis treatment. List the pros and cons for using each medication.
- Understand the complications of vertebral and hip fractures.
- List 2 ways to monitor osteoporosis and which is preferred.
- Know the special considerations for glucocorticoid-induced osteoporosis and osteoporosis in nursing homes.

- Understand the pathogenesis of osteoarthritis and how it differs from simply aging. Understand the components of cartilage.
- List 4 hallmarks for osteoarthritic disease.
- List 5 risk factors for osteoarthritis and which joints are affected.
- List 5 clinical features of osteoarthritis.
- Identify 2 measures which can slow down the progression of osteoarthritis.
- Understand the types of educational programs which improve pain and reduce costs associated with osteoarthritis.
- Identify the components of an exercise program for osteoarthritis.
- List 5 oral medications for the treatment of osteoarthritis and determine which group of patients should not use each type.
- List 4 adjuvant therapies and discuss their effectiveness.
- Discuss which patients should undergo joint replacement and the statistics associated with the elderly.
- List 6 general risk factors for falling.
- Discuss the screening process for elderly patients at risk for falling.
- Discuss the 3 successful single-interventions and how they may apply to the learner's profession.
- List 7 multifactorial assessment/interventions and consider how each may apply to the learner's profession.
- List 3 general areas which can cause gait disturbances.
- Identify helpful educational recommendations for a patient at risk for falling.
- Discuss how the psychological aspects of falling affect patients.

Respiratory Disorders and Aging, Douglas R. Allington, Pharm.D., BCPS,
Associate Professor, The University of Montana
and
Kendra Keeley, Pharm.D., BCPS, AE-C

Description of Module: This module will present information regarding the normal changes in lung function due to aging, as well as describing the pathological changes, appropriate screening tests, diagnosis and treatment of four major respiratory disorders common in adult and geriatric populations: pneumonia, asthma, chronic bronchitis and emphysema.

Objectives:

- Describe the normal functions of the lungs and recognize the common age-related changes normally associated with aging.
- Recognize the signs, symptoms and laboratory abnormalities that aid in the diagnosis of pneumonia, asthma, chronic bronchitis and emphysema.
- Identify risk factors generally associated with the development of pneumonia, asthma, chronic bronchitis and emphysema.

- Describe routine pharmacological interventions used to treat pneumonia, asthma, chronic bronchitis and emphysema.
- Identify gender, ethnicity or age differences that might influence selection of specific medications or drug delivery devices.
- Describe how different healthcare professionals can contribute to the development of multidisciplinary care plans

Skin, Wounds and Aging, Karen Zulkowski, DNS, RN, CWS

Associate Professor, Montana State University-Bozeman, College of Nursing

Description: This module will present an overview on the structure and function of aging skin.

Discussion of problems associated with aging skin includes:

- Classification and identification of wounds
- Assessment
- Current treatment and therapies

Objectives:

- Describe changes associated with aging to the skin.
- Describe pathophysiological mechanisms of wounds.
- Differentiate between different types of wounds common to the aging population
- Identify risk factors associated with wound development.
- Identify documentation necessary for wound management.
- Describe interventions for prevention, and treatment.
- Describe potential cultural differences associated with assessment of risk and pressure ulcer stage.
- Apply communication skills necessary for care of geriatric patients with cardiovascular disorders.
- Synthesize knowledge of geriatric care in planning an interdisciplinary approach to care for geriatric patients with skin or wound disorders.

Urogenital Disorders and Aging, Janet A. Hulme, MA, PT

Description: This module will present age-related changes of the urogenital system, pathologies common in the aging urogenital system, and male and female differences in the aging urogenital system. It will explore prevention strategies for common urogenital problems including lifestyle changes, nutrition, exercise and autonomic nervous system training. It will explore common pathologies of the urogenital system and treatment strategies including medication and surgery.

Objectives:

- Describe age related changes of the urogenital system.
- Describe common pathologies in the aging urogenital system.
- Describe male and female differences in the aging urogenital system.
- Describe prevention strategies for common urogenital problems including lifestyle changes, nutrition, exercise and autonomic nervous system training.

- Describe treatment strategies for common pathologies of the urogenital system including medication and surgery.
- Apply these health promotion practices in his/her professional setting.