Advancing Nursing Expertise in the Care of Older Patients with Cancer: A Multidisciplinary Educational Course for Oncology Nurses

Heidi Yulico RN, MSN, GNP-BC
Lorraine McEvoy DNP, MSN, RN, OCN
Beatriz Korc-Grodzicki, PhD, MD
Background & Significance

Currently in the United States:

- 57% of all cancers and 71% of all cancer deaths are seen in people ≥ 65 years old

At MSKCC the percentage of patients age 65 and older has also risen significantly
Rising Older Adult New Patient Registrations

- 2009: Total 25,000, 30% 65+
- 2013: Total 30,000, 44% 65+
• Older adults have a higher prevalence of chronic health conditions that can have negative effects on:

- Quality of life
- Functional Status
- Independence

• Higher incidence of co-morbidities in the geriatric patient can lead to increased rates of:

- Length of Stay
- Adverse Events
- Re-admissions
Multiple Comorbidities + Cancer = Increased Risk of Iatrogenic Events

- Nurses are in the ideal position to reduce these risks.
- As care in cancer centers shifts out of the hospital and into outpatient settings:
  - Need for education of all staff to meet the specialized needs of the geriatric oncology patient across the continuum of care.
Methods

• A multidisciplinary task force was assembled to create a two day course.
• Purpose of Course: To enhance nursing knowledge in the care of older adults with cancer.
• 13.7 Continuing Education Credits offered to participants who complete the two day program.
• Offered to all nurses at MSKCC free of charge and to nurses in the community for a minimal fee.
• Data collected from participants: pre and post-course assessment of geriatric oncology knowledge as well as overall educational experience.
Topics Covered

• Advanced Directives and Care Planning
• Age Related Physiologic Changes and Nursing Implications
• Carcinogenesis
• Geriatric Pharmacology
• Cancer and Nutrition
• Depression and Anxiety
• Pain Management
• Palliative Care
• Physical and Occupational Therapy
Faculty

- Lorrain McEvoy DNP, MSN, RN, OCN: *Nurse Leader*
- Heidi Yulico RN, MSN, GNP-BC: *Geriatric Nurse Practitioner*
- Roma Tickoo MD, MPH: *Pain and Palliative Care Physician*
- Susan Derby GNP-BC, MS, ACHPN: *Geriatric Nurse Practitioner*
- Manpreet Boparai, PharmD: *Geriatric Pharmacist*
- Christian Nelson PhD: *Clinical Psychologist*
- Donna Kelly OTR/L, Med, CLT: *Senior Occupational Therapist*
- Robin Roberts PT, DPT, GCS: *Senior Physical Therapist*
- Jennifer Aquino, PT, DPT, GCS: *Senior Physical Therapist*
- Margaret Ostrander MS, RD, CDN: *Geriatric Nutritionist*
Course Objectives

• Explain the rationale for a focus on geriatrics in oncology and provide the evidence that guides practice.

• Describe the significance of iatrogenic harm and common geriatric syndromes.

• Discuss the disparities in healthcare that exist for the elderly.

• State the cellular and molecular changes associated with advancing age.

• Explain risks associated with cancer treatment and the potential for deterioration of function and independence in the older adult.

• State the physiological changes associated with risk in older age, by system.

• Delineate concepts of advanced care planning in the older adult with cancer.
Course Objectives

• Offer nursing care strategies for older adults undergoing cancer treatments.
• Identify concepts related to the relief of pain and palliative care in the older adults with cancer.
• Differentiate aspects of drug therapy for consideration in older adults being treated for cancer.
• Discuss the effects of cancer and cancer treatment on the nutritional status of the older adult with cancer.
• Explain principles of assessment related to depression, anxiety and sleep disorders in the geriatric patient.
Teaching Methods

- Power point presentations
- Video presentations
  - Demonstration of PT and OT working with geriatric patients
- Taste tests
  - Variety of nutritional supplements
- Case Presentation
  - Small group discussion
- Take home manual:
  - Slides
  - Chart of physiological changes due to aging and nursing interventions
  - Appropriate “Try This” tools for assessment of common geriatric conditions
Case Study: Mr. J

• Mr. J. is a 77 year old male with a history of CAD, HTN and smoking, 1 ppd of cigarettes for 25 years. He quit 15 years ago. He has been diagnosed with Stage IIIA NSCLC and is undergoing neoadjuvant treatment with Docetaxel, Cisplatin, and Bevacizumab. The plan is then for Mr. J to have a lung resection and possible adjuvant treatment.

• Home Medications: ASA 81mg, BenicarHCT 40/25mg, simvastatin 20mg
• Pre-medications and post medications for this chemo regimen include Diphenhydramine (Benadryl), Ranitidine (Zantac), Dexamethasone (Decadron), Aprepitant (Emend), and Mannitol.

• Mr. J. lives alone on the second floor of a walk-up building in NYC. His daughter lives a few blocks away. She is very involved in his care and accompanies him at his treatments.
Case Study: Mr. J

Part I

• Today you are Mr. J's chemotherapy nurse for his third cycle of treatment in the ambulatory clinic. Discuss some areas of concern that you may have for this patient due to his age and treatment.

• Upon your comprehensive assessment, you find that Mr. J is experiencing bilateral foot neuropathy (from the chemo) and as a result he is ambulating less for fear of falling. Additionally, he is experiencing N/V for up to one week after chemo which has lead to reduced caloric/fluid intake. He has noticed swelling in his legs and his blood pressure is high 180/90. What actions would you take as Mr. J.'s nurse?
Case Study: Mr. J

Part II

- Mr. J has now completed his chemotherapy and is ready for surgery. He is evaluated for medical clearance by the geriatric medicine team. On ROS he complains of worsening hearing, and poor appetite with a 10 lb weight loss. He has started to wear compression stocking for his legs and was started on amlodipine 10mg. His physical exam in normal, he continues to be independent in ADLs and IADLs but has an abnormal mini-cog score.

- What are you going to focus his pre-operative teaching on?
Case Study: Mr. J

Part III

• Mr. J. is post op day one after a lung resection:
  – Upon assessing Mr. J., he states that he feels SOB and dizzy.
  – V.S. are BP 98/70, RR 28, HR 135 (irregular), T 37.1, SPO2 88% on room air
  – EKG shows rapid atrial fibrillation.

• Discuss why Mr. J. could be experiencing these signs and symptoms. Take into consideration Mr. J's age, history, diagnosis, and post operative state.

• The rapid response team is called and determines Mr. J. is hypovolemic.
  – Started on Diltiazem (Cardizem), IV fluids and 4LNC O2.
  – V.S. stabilize to BP 125/65, HR 89 (regular), RR 20, SPO2, 98% Room air, and T 37.0.

• Moving forward with Mr. J's care, what nursing care strategies would you implement?
Case Study: Mr. J

Part IV

- Mr. J. c/o of chills and dyspnea on post op day 3:
  - Vitals signs of BP130/65, HR 101, RR 26, T 37.2, SPO2, 89% on room air
  - On assessment he has bilateral rales and diminished breath sounds bilaterally
  - His mental status is altered, now A&O x 2 with an abnormal clock drawing score
  - X-Ray shows pneumonia

- Aside from the fact that Mr. J. is post op, what age related factors contribute to the development of pneumonia?
- Using the CAM is Mr. J delirious? What might be contributing to Mr. J’s delirium?

- What nursing care strategies would you implement with Mr. J?
Results

• Over the past four years, 284 nurses have completed this course.
• A 10 item questionnaire was used to evaluate knowledge gained.
• Test scores recorded for 235 participants demonstrated the following:

  - Scores improved from 64% (95% CI 62.28-66.18) to 80% (95% CI 79.01-81.83) \( p < 0.0001 \)
  - 100% of participants rated the course as very good or excellent on a 5 item Likert-scale in meeting the overall purpose and achieving the objectives of the course.
Comments from Participants

• Very informative day! Great class and will be very useful in our everyday practice!
• A must for every nurse! Excellent!
• Great program but a lot of info. However, the actual info has been prepared better and is more applicable than other courses I have taken.
• The delirium subgroups, treatments and causes in the geriatric patient population was very interesting and applicable to my practice. I will definitely use in my practice.
• Loved the case studies!
• I can assess my patients more accurately and have knowledge to refer to appropriate services.
• Raised my awareness of the needs of this growing population.
• Overall, thought the speakers were interesting and knowledgeable. Course was an immensely enjoyable and rewarding experience.
Discussion

• Benefits of course:
  – provided detailed content in a practical way that is useful for nurses
  – sparked interest in geriatrics in oncology nurses
  – interested nurses then went on to become Geriatric Resource Nurses for their unit
  – GRNs continue to meet on a monthly basis
Future Activities

• Program is being revised:
  – Create break out sessions for inpatient and outpatient nurses to focus on specific needs of each care area
  – Reach other nurses in the community and regional centers via online/teleconference

• Develop measurable outcomes to show improvement of care.
Thank you to the MSKCC 65+ Team