Seminar 1: Asthma Care

Purpose: to compare the plan of care for an Adult with asthma versus a child with Asthma

Objectives:
1. Identify factors that place an individual at risk for Asthma.
2. Describe similarities or differences in assessment findings for a child versus an adult with Asthma.
3. Explain tests and procedures used to diagnose Asthma.
4. Describe how Asthma can lead to illness.
5. Prioritize selected nursing diagnosis for a patient with Asthma, at least three.
6. Identify care outcomes for a child with Asthma; care outcomes for an adult.
7. Develop a teaching plan to be used in teaching parents of a child with Asthma.
8. Explain reason for chosen intervention.

Preparation:
2. Type answers to all of the above objectives. See action plan below.
3. Read case study and give brief answers to the study questions.

Participation:
1. Divide into small groups. Each group is to select a facilitator and recorder. Discuss and share answers to all the objectives and questions in the case study. (30 minutes)
2. Write down a brief teaching plan about the following subjects to be used for teaching parents of a child with Asthma:
   a. How to avoid triggers to an Asthma attack?
   b. Action Plan to prevent an asthma attack using peak flow meter readings.
   c. Maintenance and rescue medications: when and how to use them.
3. Recorder will share findings, group answers to the larger group. (30 minutes)
4. Prioritize nursing diagnosis and interventions in the case study.
5. State rationale for decisions.

Refer to Asthma case study.

Action Plan: Submit answers to seminar objectives, teaching plan and case study questions, typed, double spaced, in a folder at the end of seminar.

If seminar is part of combined Simulation lab activity, bring folder with answers to SIM lab objectives METI PNCI handout to assigned SIM lab – date in calendar.
Seminar 1: CASE STUDY – Asthma

Manuel a 22 year old man lives in a small mountain town in Colorado. He is highly allergic to dust and pollen. Anxiety seems to play a role in exacerbating his asthma attacks. His wife drove him to the clinic when his wheezing was unresponsive to beclomethazone (QVAR, Vanceril) and ipratropium bromide (Atrovent) inhalers.

Upon arrival, his VS are 152/84, pulse 124, RR 42, temp 100.4 . He was started on 4L 02/NC, an IV of D5W to keep vein open.

His ABG results are : pH 7.31, PaCO$_2$ 48 mmHg, HC0$_3$ 26 mmol/L, PaO$_2$ 55 mmHg, SaO$_2$ 80%.

1. Explain the pathophysiology of asthma.

2. Identify pathophysiologic responses by Manuel during his asthma attack.

3. Are his VS acceptable? State your rationale.

4. Comment on Manuel’s SaO$_2$ and ABGs.

5. What is the rationale for a NRB mask instead of nasal cannula?

6. What does his blood pH and CO2 level indicate about the duration of this asthma attack?

7. Identify the drug classifications and actions of Vanceril/QVAR and Atrovent.

8. Are Vanceril/QVAR and Atrovent appropriate for use during an asthma attack? Explain

9. The physician orders albuterol 3 mg by nebulizer treatment STAT. What is the rationale for this order?

10. What is the rationale for immediately starting Manuel on oxygen?

11. List 5 short-term interventions that may help relieve Manuel’s symptoms. Start with independent nursing intervention.

1.

2.

3.

4.

5.
After several hours of IV and PO rehydration and a second albuterol treatment, Manuel’s wheezing and chest tightness resolve, and he is able to expectorate his secretions. The doctor discusses Manuel’s asthma management with him, and he tells him that his inhalers meet his needs on a day to day basis but fail him when he has an asthma attack. He was discharged with a prescription for Proventil MDI and a “spacer”. The doctor recommended that he call the pulmonary clinic for follow-up with a pulmonary specialist.

12. What issues would you address in discharge teaching with Manuel?

You asked Manuel to demonstrate the use of MDI (metered dose inhaler). He vigorously shakes the canister, holds the inhaler at an angle pointing toward his cheek, in front of his mouth and squeezes the canister as he takes a quick, deep breath.

13. What common mistakes has Manuel made when using the inhaler?

14. What would you teach Manuel about the use of his MDI?

You gave him instructions about follow-up with the pulmonary specialist, and instructed him in writing to ask the specialist about a “peak flow meter” PFM.

15. What is the function of a peak flow meter, and how is it used?

16. Manuel’s wife asked about the possibilities of another attack. How would you respond?

People with asthma often have special problems with post-operative care. Anesthesia can exacerbate their asthma.

17. If you have a post-operative patient with a history of asthma, what early signs and symptoms would indicate respiratory distress? List six.

1) 
2) 
3) 
4) 
5) 
6) 

Tip: To hear lung sounds better, first have the patient turn her/his head to the side away from you, and cough prior to auscultation of the chest.
Seminar 2-
Legal – ethical Issues in the Care of the patient with Chronic Respiratory Alterations - COPD and PTB

**Purpose:** To discuss some of the legal-ethical issues faced by patients with chronic respiratory illness (COPD and PTB) and to describe the role of the nurse in assisting patients achieve appropriate health care outcomes.

**Objectives:**
1. Explain some of the legal-ethical issues related to the care of patients with COPD.
2. Explain some of the legal-ethical issues related to the care of patients with Pulmonary Tuberculosis.
3. Based on your knowledge of population groups at risk for COPD and PTB, identify similarities and differences between actual and potential legal-ethical issues of patients with COPD and PTB.
4. Contribute to the discussions and decisions that would assist patients achieve appropriate health care outcomes.
5. Describe the advocacy role of the nurse caring for patients with these type of disorders.

**Preparation:**
1. **Review** pathophysiology, manifestations, treatment, and prognosis of patients with long term COPD and PTB. Med-surgical textbook.
2. **Study** ethical dilemmas on Patient Adherence of a patient with PTB. **Read** ethical dilemma on Advanced Directives of a patient with COPD.

**Participation:** Day of SEMINAR:
- Divide into small groups. Each group may choose a facilitator and recorder. Discuss and share answers to objectives and reading assignment (dilemmas) for 30 minutes.
- Each group will choose a facilitator and recorder. Develop a concept map in an assigned area studied for preparation. Be sure to include advocacy role of the nurse in specific topic. Plan to use the whiteboard or other media during presentation.

**Submit** answers to objectives 1, 2, 3, and 5, typed, double space, in a folder, at the end of the seminar.
Seminar 3-
Case Study: Cardiovascular - HTN

Purpose:
- To identify risk factors for alterations in health related to hypertension
- To describe complications from hypertension
- To identify patients’ teaching needs
- To select appropriate teaching strategies
- To write a nursing diagnosis that is supported with evidence on basis of assessment findings.

Preparation:
2. Read the following case study and complete the critical thinking points.
3. Develop a concept map for this client using the nursing process.

In Seminar Participation:
1. In small groups, critique each other’s critical thinking points, supporting your conclusions with rationales.
2. Create a pediatric or adult patient scenario using the preparation study material and role-play your scenario for the whole group or create 2 test questions to go along with the scenario.

Case Study
Patient Profile:
Mr. R is a 45-year-old African-American man with no previous history of hypertension. At a screening clinic, his BP was found to be 180/120 mm Hg.

Subjective Data:
- Father died from stroke at age 60.
- Mother is alive and has hypertension.
- States that he feels fine and is not a “hyper” person.
- Smokes one pack of cigarettes daily.
- Drinks a six-pack of beer on Friday and Saturday nights.
- Believes that BP medication interferes with his love life.

Objective Data:
Physical Examination
- Grade I Keith-Wagener retinopathy
- Sustained apical impulse palpable in the fourth intercostals space just lateral to the midclavicular line.

Diagnostic Studies:
- ECG: Left ventricular hypertrophy
- Urinalysis: protein 31 mg/dl
- Serum creatinine level: 1.6mg/dl

Collaborative Care
- Low-sodium diet
- Hydrochlorothiazide 12.5 mg/day
Critical Thinking Points:
1. Explain the systolic and diastolic blood pressure readings and the impact of sustained hypertension on the clients organs
2. According to the Seventh Annual of the Joint National Committee on Prevention, Detection, Evaluation & treatment of hypertension, identify if this client has primary or secondary hypertension using the data
3. Describe the significance of the subjective and objective assessment findings
4. Discuss medications that may be prescribed using the Step-therapy for hypertension
5. Identify three points of discussion the nurse should include in a teaching plan with this client
6. In priority order, identify four actual nursing diagnoses, including expected outcomes and two nursing and two collaborative interventions for each, the nurse should include in the clients plan of care
Seminar 4 – Care Planning: Heart Failure

**Purpose:**
To develop a plan of care based on assessment data
To prioritize nursing diagnosis & interventions

**Preparation:**
   **Heart Failure**
3. **Read** the following case study and **answer** the critical thinking questions.
4. **Identify** the differences in diagnosis & management if this were a child with CHF.
5. **View video**: NVC 234 “Heart Failure & Pulmonary Edema”

**Participation:**
1. In small groups, arrive at your conclusions regarding the critical thinking questions.
2. Each group will create their own heart failure or pulmonary edema scenario. Each group will role-play their scenario for the class or create 2 test questions related to their scenario.

**Case Study:** Mr. J.T. is a 58-year-old Caucasian male admitted to your unit with syncope and heart failure. He was brought to the hospital after “passing out” for 2 minutes after a severe bout of coughing. You discover his health history includes type II diabetes, significant abdominal obesity, hypertension, CHF, chronic hypoxia, frequent pneumonia, hyperlipidemia, and polycythemia. He has no history of smoking or alcohol use. His weight is 360 pounds. Over the last week he has had intermittent chest pain with SOB on exertion. The SOB has increased during the last 12 hours. He has been hospitalized in the past for chest pain but has never been diagnosed with an M.I. On admission he has orthopnea, a severe dry cough, palpitations, and SOB. He denies chest pain. His VS are 166/104, 94,22,36.7. You hear muffled S1 and S2 and a possible S3. He has moderate pretibial edema to his knees and a few bibasilar crackles. You place him on O2 @2L/min by nasal cannula and insert a Foley catheter. His blood glucose is 347 mg/dL and Hct is 50%. Cholesterol & triglyceride levels are 320 & 266mg/dL, respectively.

**Critical Thinking Questions**
1. From the scenario presented, J. T. has hyperglycemia, hypertension, and hyperlipidemia. What is the evidence for each? In what order should they be addressed, and why?
2. Judging from the admission information, do you think he has right-sided HF, left –sided HF, or both? Cite your evidence.
3. List three other things you could assess to confirm your suspicion.
4. What class of medication could be used to treat his CHF and hypertension and to prevent diabetic neuropathy? What beneficial action of these medications would help Mr. J.T.?
5. Prioritize four nursing problems related to J.T.’s care.
6. What would be your four priority nursing problems if this was a child with CHF?
7. Describe the nursing management differences if this were a child with CHF.
### Congestive Heart Failure Worksheet

**Pathophysiology:**

- [ ] ________________
- [ ] ________________
- [ ] ________________
- [ ] ________________
- [ ] ________________

**Signs/Symptoms: Left heart failure**

- [ ] ________________
- [ ] ________________
- [ ] ________________
- [ ] ________________
- [ ] ________________
- [ ] ________________

**Signs/Symptoms: Right heart failure**

- [ ] ________________
- [ ] ________________
- [ ] ________________
- [ ] ________________
- [ ] ________________

**Labs:**

- [ ] ________________
- [ ] ________________
- [ ] ________________
- [ ] ________________
- [ ] ________________

**Diagnostic studies:**

- EKG ________________
- Echocardiogram (ejection fraction <40)
- Cardiac catheterization
- Angioplasty

**Heart sounds:**

- S₁
- S₂
- S₃
- S₄
- Summation gallop

**Discharge concerns:**

- Daily weight
- Na diet
- Fluids
- Activity
- Medications:
- Follow-up

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**Pulmonary Edema**

**Pathophysiology:**

__________________________________________________________________________

**Signs/Symptoms:**

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**Labs:**

__________________________________________________________________________

**Treatment:**

Diagnostics:

__________________________________________________________________________

**Medications:**

__________________________________________________________________________

**Other information:**

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
Seminar 5: Teach & Learn - commonly Sexually Transmitted Diseases

**Purpose:** to understand information gathered about common sexually transmitted diseases and apply this knowledge to teaching others.

**Teaching/Learning Objectives:**
1. Identify the factors contributing to the high incidence of STDs.
2. Explain the etiology, clinical manifestations, complications and diagnostic abnormalities of gonorrhea, syphilis, genital herpes, chlamydial infections, and condylomata acuminata.
3. Compare primary genital herpes with recurrent genital herpes.
4. Explain the collaborative care and drug therapy of gonorrhea, syphilis, genital herpes, chlamydial infections, and condylomata acuminata.
5. Identify assessments and nursing diagnoses for clients who have STDs.
6. Describe the nursing management of patients with STDs.
7. Describe the nursing role in the prevention and control of STDs.

**Preparation:**
1. Each seminar group is divided into smaller groups (pre-assigned by instructor).
2. Each group is assigned one STD: gonorrhea, syphilis, genital herpes, chlamydial infections, and condylomata acuminata.
3. Using the attached outline, each group will research information required for presentation from the Med-Surgical text, handouts, internet and other resources.
4. Each group is to develop a handout of the assigned STD with basic information and make copies of handouts for everyone.

**Presentation:** Select from a combination of the following suggested presentations.

1. Act out a scenario of a person seeking diagnosis or treatment of the STD.
2. A member of the group acts out one of the following roles: nurse, physician, male patient, female patient, a microorganism, a drug or other roles such as, a spouse, a parent, sexual partner. The “patient” interacts with the “nurse” in describing the symptoms. The nurse takes an appropriate history. The “microorganism” describes the transmission.
3. A pair of students’ role plays a nurse teaching the patient about the prevention of infection. Students reverse roles and select one of the emotional reactions expressed during the presentation and role-play the nurse providing support.
4. Use posters, brochures, power point or the board to provide the STD information.

**Day of Seminar:**
1. Each group will distribute their handouts prior to the presentation. Student names of each group will be written on the handout.
2. Each group has 15 minutes to present teach/learn presentations or role play.
3. After the presentations, the large group will review how objectives were met and evaluate content and feelings and the roles depicted in the presentations.
Outline for Handout and Presentation

I. Name of STD
II. Etiology: causative organism/ transmission
III. Pathophysiology
IV. Clinical Manifestations
V. Complications
VI. Diagnostic Studies
VII. Collaborative Care
VIII. Nursing care/teaching
IX. References
X. Handouts
XI. Student Group Members
Seminar 6 – Domestic Violence

Objectives:

1. Identify assessed behaviors that indicate a person may be a victim of domestic violence

2. Describe the “typical” myths about domestic violence victims

3. Describe the nurse’s role in domestic violence situations

Preparation:

1. Visit a web site that addresses an aspect of domestic/family violence. This could include: spousal abuse, elder abuse, child abuse, partner abuse, trans-cultural issues related to domestic violence.

2. Bring a copy of the Internet resource to seminar.

Participation:

1. In small groups – share your resource information and choose a factor about domestic violence that you will teach the rest of the class.

2. Each group will be given 30 minutes to prepare the presentation

3. Each group will give a 20-minute presentation to the class.

4. As a class discuss your feelings about the issue of domestic violence.

Submit:

- Internet source describing objectives 1 and 2. Highlight answers to objectives.
- Typed (double spaced in a folder) paper detailing your answers to objective 3 (nursing role in response to domestic violence). Please submit paper and internet resources in a folder.
Seminar 7 – Critical Thinking Exercise  
Case Studies – Urinary Tract Infection (UTI)

Objectives:

- Describe characteristics of a urinary tract infection
- Identify nursing interventions for a client with an acute urinary tract infection
- Discuss nursing interventions to reduce risk for urinary tract infection recurrence
- Discuss collaborative issues and interventions for a client with a urinary tract infection

Preparation & Instructions:

- Complete critical thinking activity
- Create a concept map for a client with an acute urinary tract infection using the nursing process

Case Study

The nurse practitioner saw a 22-year-old female client for a history of painful, frequent urination. The client complains of painful, frequent urination with the passage of small amounts of urine. The patient reports a fever of 38.5°C last night with chills, and back pain. The client is concerned that there was blood in the urine with her last void. The client reports that this is her third attack of painful urination and back pain in four months. She was treated with a 10-day course of Septra for each attack with symptom resolution within a few days. The patient is anxious because her father died of bladder cancer and this is the first time her urine has been red. She has used pyridium obtained over the counter for dysuria and feels it has been helpful.

Current VS: Temp 39 C, BP 84/45, HR 108, RR 24. She has no vaginal discharge, pharyngitis, chest pain or SOB. The mucous membranes are dry but she denies nausea, vomiting and diarrhea. She smokes 1 PPD of cigarettes, drinks wine occasionally and denies IV drug use. She has one sexual partner for the last 12 months. She has no changes in diet except she has changed from fresh coffee to instant to save money. Orthostatic BP check reveals decrease to 78/40 from lying to sitting position and HR increase to 128 with complaint of dizziness.
Critical Thinking Activity
1. Discuss the prevalence and pathophysiology of urinary tract infections
2. Describe the clinical manifestations of urinary tract infection across the lifespan including ages 3-5 years old, 18-65, and 70-85 years old.
3. List diagnostic test findings related to an UTI and describe their significance: urinalysis, CBC, Chem 7 panel, eGFR, and lactate
4. What admission orders would you advocate for upon receiving this patient on the inpatient unit? Include diet, activity and possible diagnostic tests.
5. Create a nursing care plan for this patient. Identify at least 3 nursing diagnoses, outcomes and interventions.
6. Discuss long-term problems of recurring urinary tract infections.
7. Describe at least 3 medications prescribed for the treatment of urinary tract infections and the nursing role.
8. Describe the relevance of the family history of bladder cancer in relation to this patients’ concern. List risk factors for bladder cancer.
Seminar 8 – Critical Thinking Exercise
Case Studies – Urinary Diversions

Objectives:
- describe characteristics of an incontinent urinary diversion
- identify nursing interventions for a client with an incontinent urinary diversion
- discuss nursing interventions to reduce risk for urinary tract infection occurrence for a client with an incontinent urinary diversion
- discuss collaborative issues and interventions for a client with a urinary diversion

Preparation & Instructions:
- Urinary diversions
- Complete critical thinking points
- Create a concept map for a client with a recently created incontinent urinary diversion using the nursing process
- Watch the Mosby-DVD for managing a urostomy
- Participate in seminar

Case Study

A 63-year old client underwent a cystectomy with a creation of an ileal conduit.

On post-operative day two, the nurse receives report from the previous shift nurse and completes the nightshift assessment for this client. (Report & assessment will be provided).

Post-operative day four:

During the report, the night shift nurse stated that the client is scheduled for discharge. (Education tool will be provided)

Critical Thinking Points

1. Discuss pathophysiology of incontinent urinary diversions
2. Identify client community resources
3. Describe the nursing care of a client with an incontinent urinary diversion
4. Discuss complications related to incontinent urinary diversions
5. Identify common nursing diagnoses for incontinent urinary diversions
6. Discuss self-care management for a client with an incontinent urinary diversion
7. Identify online and community-based resources for patients with urinary diversion
CASE STUDY KAREN
URINARY DIVERSION AFTER BLADDER CANCER

Karen is a 52 year old Caucasian female, married with 2 grown children, employed professional with good health insurance, full code, and has been diagnosed with transitional cell carcinoma of the bladder.

She noted bleeding about 11 months ago which she attributed to the uterus since she was perimenopausal. Not alarmed, she waited until her scheduled GYN visit the next month and had an endometrial biopsy, which was negative for cancer. She was given a course of antibiotics. She continued to complain of vaginal bleeding, now with clots and she noted the bleeding occurred only with urination. She was referred to urology. A cystoscopy was done and a bladder tumor was seen. The tumor was also confirmed by IVP and sonogram and a TURB was performed. Pathology showed spread to the bladder muscle layer. A cystectomy was recommended. Her bone scan was negative but her CT scan showed lymph node spread and she underwent 6 months of chemotherapy before the cystectomy ("neoadjuvant" therapy, i.e., treatment given before the primary therapy). She also had a total hysterectomy and radical lymph node dissection with the cystectomy (a 10 hour surgery).

NOTE: After the chemotherapy, the CT scan showed no lymphadenopathy, and repeat biopsies of the bladder showed no sign of cancer. The surgeon and oncologist were very pleased and said it was the best possible outcome but surgery was still recommended.

The patient describes her diagnosis as coming “like a lightning bolt from nowhere”. She does not smoke, drink to excess, use dyes, drink coffee or alcohol. She had felt well aside from the bleeding, went to the gym before work every day. She has carried a copy of her sonogram around with her as proof that she had a tumor and describes it as “this fringed stump of a thing sticking up from the floor of my bladder, looking like a closed sea anemone”. The idea of the surgery did not frighten her but the chemotherapy, because of the toxicity of the course of therapy, did. She took a very proactive approach. She had been studying clinical hypnosis and sought help from her teacher working with visualizations and self hypnosis creating an “induction tape” to use daily during the chemo infusions. Her tape dealt with relaxation, healing energy, and talking to her immune system and the healing portions of her mind and body. She visualized chemotherapy side effects as proof that the chemo was working, welcoming the chemo. She had massages, and a wide email support group, most of whom were cancer survivors.

After the chemotherapy she was completed, she was given 6 weeks to decide on what type of surgery she needed. Though CT scans showed no lymphadenopathy, one surgeon quoted a 70% recurrence rate and another 100% rate of recurrence without surgery. She was given the names of two different support groups in the community with men and women about her age who'd had a cystectomy and who had chosen the different urinary diversion types (Ileal Conduit, Indiana Pouch). Both groups found that their methods worked well with their lives and they were doing well in general.