



Medical Surgical Nursing (NUR 201)
Model answer of Final Semester Exam
Second Year- First Term

Date: 4/1/2015

Time allowed: 3 hours

Questions parts: 5

No. of papers: 11

total marks 80 marks

Section I: Multiple Choice Questions: (25 marks)

***Please circle the correct answer only :**

1- The nurse assesses a patient suspected of having an asthma attack. Which of the following is a common clinical manifestation of this condition?

- a) Audible crackles and orthopnea
- b) **An audible wheeze and use of accessory muscles**
- c) Audible crackles and use of accessory muscles
- d) Audible wheeze and orthopnea

2- Your patient had surgery to form an arteriovenous fistula for hemodialysis. Which information is important for providing care for the patient

- a) The patient shouldn't feel pain during initiation of dialysis
- b) **The patient feels best immediately after the dialysis**
- c) Using a stethoscope for auscultation the fistula is contraindicated
- d) Taking a blood pressure reading on the affected arm can cause clotting of the fistula.

3- Following surgery, Sami complains of mild incisional pain while performing deep- breathing and coughing exercises. The nurse's best response would be:

- a) Pain will become less each day.
- b) This is a normal reaction after surgery.
- c) **With a pillow, apply pressure against the incision.**
- d) I will give you the pain medication the physician ordered.

4- Pain that is experienced in one part of the body but originates in another organ or area is an example of:

- a) Acute pain
- b) Chronic pain
- c) **Referred pain**
- d) Psychogenic pain

5-When the nurse assesses the patient with acute pain, she found that, increase pulse, respiration, blood pressure, &dilated pupils, this indicates:

- a) Muscle response
- b) Autonomic nervous system response**
- C) Behavioral response
- d) All of the above

6-A chemotherapeutic agent is ordered as an adjunct measure to surgery. Which of the following statements about chemotherapy is true?

- a) It is a local treatment affecting only tumor cells
- b) It affects both normal and tumor cells**
- c) It has been proven as a complete cure for cancer
- d) None of the above

7-Peptic ulcer more likely to being in the:

- a) duodenum than in the stomach**
- b) stomach than in the duodenum
- c) duodenum than in the pylorus
- d) pylorus than in the duodenum

8-Ali complains from abdominal pain, nausea and distention. from Ali family history founded that family blood group is (o)so we expected that this patient suffer from:

- a) Liver cirrhosis
- b)Peptic ulcer**
- C)Cholecystitis
- d)All of the above

9- After abdominal surgery, the circulating and scrub nurses have critical responsibility about sponge and instrument count. Counting is performed thrice: during the preincision phase, the operative phase and closing phase. Who counts the sponges, needles and instruments?

- a) The scrub nurse only
- b) The circulating nurse only
- c) The surgeon and the assistant surgeon
- d) The scrub nurse and circulating nurse**

10- The nurse is caring for a client with cirrhosis of the liver. The client has developed ascites and requires a paracentesis. Which of the following symptoms is associated with ascites and should be relieved by the paracentesis?

- a) Pruritus.
- b) Dyspnea.**
- c) Jaundice.
- d) Peripheral neuropathy.

11- Ali being treated with radiation therapy. What should be included in the plan of care to minimize skin damage from the radiation therapy?

- a) Cover the areas with thick clothing materials
- b) Apply a heating pad to the site
- c) **Wash skin with water after therapy**
- d) Avoid applying creams and powder to the area

12- The nurse is doing teaching with the family of a client with liver failure. Which of the following foods should the nurse advise them to limit in the client's diet?

- a) **Meats and beans.**
- b) Butter and gravies.
- c) Potatoes and pasta.
- d) Cakes and pastries.

13-A female client is receiving supplemental oxygen. When determining the effectiveness of oxygen therapy, which arterial blood gas value is most important?

- a) pH
- b) Bicarbonate
- c) **Partial pressure of arterial oxygen**
- d) Partial pressure of arterial carbon dioxide

14- A client with cirrhosis of the liver develops ascites. Which of the following orders would the nurse expect?

- a) **Restrict fluid to 1000 mL per day.**
- b) Ambulate 100 foot. three times per day.
- c) High-sodium diet.
- d) Maalox 30 ml P.O. BID.

15- Adriamycin, Vincristine, Prednisone and L asparagine (types of chemotherapy drugs) are given to the client for long term therapy. One common side effect, especially of Adriamycin is alopecia. The woman asks: "Will I get my hair back once again?" The nurse respond is by saying:

- a) **Don't be sad, of course you will get your hair back."**
- b) "We are not sure, let's hope it'll grow."
- c) "This side effect is usually permanent, but I will get the doctor to discuss it for you."
- d) "Your hair will regrow in 3 -6 months but of different color, usually darker and of different texture."

16-A client with angina will have to make lifestyle modifications. Which of the following statements by the client would indicate that he understands the necessary modifications in lifestyle to prevent angina attacks?

- a) I know that I will need to eat less, so I will only eat one meal a day.”
- b) I will need to stay in bed all the time so I won't have the pain.”
- c) I'll stop what I'm doing whenever I have pain and take a pill.”
- d) I will need to walk more slowly and rest frequently to avoid the angina.”**

17 An adult is diagnosed with hypertension. He is prescribed chlorothiazide (Diuril) 500 mg PO. What nursing instruction is essential for him?

- a) Drink at least two quarts of liquid daily.
- b) Avoid hard cheeses.
- c) Drink orange juice or eat a banana daily.**
- d) Do not take aspirin.

18- If it takes longer than 3 seconds for the color to return when assessing capillary refill, it may indicate which of the following?

- a) Decreased arterial flow to the extremity**
- b) Increased arterial flow to the extremity
- c) Decreased venous flow from the extremity
- d) Increased venous flow from the extremity

19- Which of the following is the most important lifestyle modification for the hypertensive patient who is obese?

- a) **Reduce weight.**
- b) Restrict salt intake.
- c) Increase potassium intake.
- d) Decrease alcohol intake.

20-Which condition would contraindicate the use of chest physiotherapy for a client with pneumonia?

- a) Recent abdominal cholecystectomy**
- b) Diabetes mellitus
- c) Rheumatoid arthritis
- d) Ephysema

21- The nurse is discussing hypertension with a group of people. Which person is at greatest risk for hypertension?

- a) A 63-year-old overweight Caucasian female worker who smokes and whose parents both had high blood pressure.**
- b) A 52-year-old African-American female of normal weight whose parents have diabetes and who is an avid swimmer.
- c) A 48-year-old Hispanic-American smoker whose father had high blood pressure.
- d) A 45-year-old Native American who leads a sedentary life and smokes

22- The wife of a man who is diagnosed with angina pectoris asks the nurse how she would know if her husband had a heart attack rather than angina. What should the nurse include in the reply?

- a) **Crushing chest pain not relieved by nitroglycerin is likely to be a heart attack.**
- b) Epigastric pain relieved by antacids is likely to be angina.
- c) Chest pain that does not go down the left arm is usually angina.
- d) Chest pain not associated with activity or excitement is probably angina.

SITUATION: Mr. Ahmed is a 60 year old male client admitted to the hospital with the diagnosis of pneumonia. He complains of pain when coughing.

23- What action should the nurse take in assisting Mr. Ahmed in doing deep breathing and coughing exercise?

- a) Recognize that the patient is too sick to cough at this time
- b) Splint the patient's chest while he coughs
- c) Turn Mr. Ahmed to the unaffected side and ask him to cough
- d) **Encourage him to cough and then give her pain medication as ordered**

24- A sputum specimen was collected from Mr. Ahmed for culture and sensitivity. This study is to ascertain which of the following facts?

- a) The virulence of microorganism involved
- b) **The antibiotics which would be most helpful**
- c) The patients probably reaction to the causative microorganism
- d) The patient's sensitivity to antibiotics

25- Laboratory reports shows RBC : 2,000,000, WBC: 5,000 and Platelets : 300,000. Considering the above findings which of the following clinical manifestation is the most likely manifestation Mr. Ahmed is to exhibit?

- a) Decrease respiration and increase pulse
- b) Increase respiration and normal pulse
- c) Normal Respiration and increase pulse
- d) **Increase pulse and increase respiration**

Section II: Please, read the statement carefully and write the letter (T) if the statement is true and the letter (F) if the statement is false. (10 marks)

Item	True/False
1- cholangiography means dye is injected directly in to the bronchial tree .	
2- There no relation between age and incidence of hypertension	
3- Drinking coffee, cola and excessive smoking are associated with decreased risk of ulcer development.	
4- Chronic cholecystitis manifests with non-specific symptoms such as nausea, vague abdominal pain, belching, and diarrhea.	
5- DM is a disease characterize by gradual progression deterioration of renal function over month or years.	
6- Insulin dependent diabetes mellitus is termed by maturity onset diabetes depends on insulin in treatment.	
7- Nutrition is one of the most powerful treatments for diabetes	
8-DM is the most common cause of chronic renal failure.	
9-Early postoperative ambulation affect in prevention of paralytic ileus	
10-Patient with COPD complain of edema in lower limb due to enlarged in the liver	

1	2	3	4	5	6	7	8	9	10
<u>f</u>	<u>f</u>	<u>f</u>	<u>t</u>	<u>f</u>	<u>t</u>	<u>t</u>	<u>t</u>	<u>t</u>	<u>t</u>

Section III: Matching Type Questions (20 marks)

Part 1

Match the definition in column A with the correct word in column B

Column A				Column B
1) simple opening of the gallbladder				a- Choledochostomy
2) stone in the gall bladder				b- Cholecystectomy
3) Cholecystectomy and exploration of common bile duct				c- Cholecystostomy
4) inflammation of the gall bladder				d- cholelithiasis
5) is removal of the gallbladder to after ligation the cystic duct and vessels				e- Cholecystitis
1	2	3	4	5
c	d	a	e	b

Column A				Column B
6- inflammatory process in lung parenchyma usually associated with a marked increased in interstitial fluid				a-COPD
7- pulmonary hypertension will lead to right ventricular hypertrophy followed by right ventricular failure				b-Emphysema
8- reversible hyper responsiveness resulting in diffuse narrowing of the airway				c-Cor - pulmonal
9- nonreversible process of airway narrowing and loss of supporting tissue				d-Asthma
10- enlargement of the airspaces due to dilatation and/ or destruction of the alveolar walls				e-Pneumonia
6	7	8	9	10

e	c	d	a	b
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part (2)

Match the description in column I with the correct word in column II

Column I				Column II
1- this nurse is responsible for check & record all drugs required during the operation				a- Assist the scrub nurse
2- assist with surgical draping of patient				b -Scrub Nurse
3- positions patient on operating room table according to the type of procedure &surgeons preference				c-Anesthesia nurse
4-Monitor of level of consciousness, airway and vital signs				d-postoperative phase
5-confirm that the patient has signed the operative consent				e-Reception nurse
1	2	3	4	5
c	b	a	d	e

Column I				Column II
6- It is silent killer				a- ISH
7- Group of drugs used in treatment of hypertension				b- Non modifiable hypertension
8- Age, Sex, and family history				c- modifiable hypertension
9 - stress , obesity, and nutrients				d- hypertension
10- Isolated systolic hypertension				e- Diuretics
6	7	8	9	10
d	e	b	c	a

Section IV: Short notes questions (15 marks)

1- List Complications of cholecystectomy ? (1.5 mark)

- Bile leak ("biloma")
- Bile duct injury Abscess
- wound infection
- bleeding (liver surface and cystic artery are most common sites)
- hernia

2- Give an account on Nutritional and Supportive therapy of cholecystitis patient ? (1.5 marks)

1- Rest, intravenous fluids, nasogastric suction, analgesia, and antibiotic agents. Unless the patient's condition deteriorates,

2- Surgical intervention is delayed until the acute symptoms subside and a complete evaluation can be carried out

3 - The diet immediately after an episode is usually limited to low-fat liquids. The high in protein and carbohydrate into skim milk.

4- The patient should avoid eggs, cream, pork, fried foods, cheese and, gas-forming vegetables, and alcohol.

5- It is important to remind the patient that fatty foods may bring on an episode. *Dietary management may be the major mode of therapy in patients who have had only dietary intolerance to fatty foods and vague gastrointestinal symptoms*

3- Describe Criteria of peptic ulcer pain? :(2 marks)

- Dull, gnawing pain and a burning sensation in the mid epigastrium or in the back are characteristic.

- Pain is relieved by eating or taking alkali; once the stomach has emptied or the alkali wears off, the pain returns.
- Sharply localized tenderness is elicited by gentle pressure on the epigastrium or slightly right of the midline.

4- Enumerate effect of early postoperative ambulation: (3 marks)

1- Increase in rate and depth of breathing:

- Prevention of atelectasis and hypostatic pneumonia.
- Increased mental alertness from increased oxygenation to brain.

2- Increase in circulation:

- Nutrient required for healing are more available to wound.
- Prevention of thrombophlebitis/ deep vein thrombosis(DVT)

3- Increase in kidney function:

- Prevention of urinary retention
- Increased micturition.

4- Increase in metabolism:

- Restoration of nitrogen balance.

5- Prevention of loss of muscle tone.

6- Increase in peristalsis:

- Promotion of expulsion of flatus/ gas
- Prevention of abdominal distention and gas pain .
- Prevention of constipation.
- Prevention of paralytic ileus.

5- Give short note about critical care guidelines for acute myocardial infarction (2 marks).

Goals:

- Successful treatment of acute attack and prompt alleviation of manifestations.
- Prevention of complications and further attacks.
- Rehabilitation and education of client and significant others.
 - The client who suffers from an acute MI needs immediate admission to hospital with coronary care unit (CCU).

- **During 24 hours** after MI, is the time of highest risk of sudden death so invasive monitoring (arterial and pulmonary artery pressure lines) is commonly used.
- **Pain control** is a priority, because continued pain stimulated autonomic nervous system and increases preload and myocardial demands →so oxygen is used to treat tissue hypoxia.
- **Because dysrhythmias are common,** ECG monitoring and antiarrhythmics are begun. Anticoagulants are given to reduce the risk of embolism, stool softeners to relieve constipation and to lower the risk of bradycardia from straining.
- **Recently, the thrombolytic therapy** (e.g.) streptokinase, urokinase). That lyse or dissolve the clot is commonly used. To be most effective, it must be given within 3 to 6 hours after the onset of chest pain. **IV heparin** after that is usually continued for 5 to 7 days.

6 – list the aims of dietary treatment for DM. patient ? (2 marks)

- Ensuring weight control
- providing nutritional requirements
- Allowing good glycemic control with blood glucose levels as close to normal as possible
- Correcting any associated blood lipid abnormalities
- Ensuring consistency and compatibility with other forms of treatment if used, for example oral agents or insulin.

7- Differentiate between acute and chronic pain. (3 marks)

(1) Acute pain

- (a) Generally rapid onset
- (b) Varies in intensity from mild to severe
- (c) May last for a brief period up to a period of 6 months
- (d) Protective in nature, warns of tissue damage or organic disease
- (e) Once underlying cause is resolved, pain disappears

(f) Examples - pricked finger, sore throat, post surgical pain

(2) Chronic pain

- is prolonged pain, usually lasting longer than 6 months, it is not always associated with an identifiable cause and interferes with normal functioning
- May be limited, intermittent or persistent
- The client with chronic pain often is depressed, withdrawn, immobile, and/or controlling
- range from mild to severe and may be continuous or intermittent
- Cancer often produced chronic pain; chronic postoperative pain is rare but may occur after incision in the chest wall, radical mastectomy

Section V: case study question (10 marks)

Mr. Ahmed is admitted to the respiratory unit with exacerbated COPD. He has a history of emphysema and now has an acute infection complicating his disease. His lung sounds are very diminished, and he is short of breath at rest, even on 2 L of oxygen per nasal cannula. You walk into his room when he puts on his call light and find him sitting on the bedside commode with a look of panic in his eyes. He is gasping for breath, his color is gray, and his respiratory rate is 36 per minute.

1. How to assess Mr. Ahmed condition? (4 marks)

Assessment :

Health history: (emphysema)

- In relation to current symptoms.
- Presence of shortness of breath or difficulty breathing.
- Chest pain and its relationship to breathing.
- Cough: productive or non productive, color, consistency of sputum.
- Others symptoms relation to chronic illness.
- Current medications: or allergies medication.

Physical examinations

- Presentation, apparent distress (with a look of panic in his eyes).
- Vital signs including fever, skin color (gray), respiratory excursion (gaspings, respiratory rate is 36 per minute).
- Shortness of breath at rest, even on 2 L of oxygen per nasal cannula and Use of accessory muscles of respiration.
- Lung sounds are very diminished.

Diagnostic tests:

- WBC
- Sputum gram stain.
- Culture and sensitivity.
- Chest x-ray or CT scan.

2- Discuss the nursing care plane for Mr. Ahmed at least three nursing diagnosis? (6 marks)

- In effective air way clearance due to increase mucus production.
- In effective breathing pattern due to decrease energy and fatigue / anxiety, pain.
- Activity intolerance due to imbalance between o2 supply and demand/ pain.
- Risk for deficient fluid volume related to fever and a rapid respiratory rate
- Imbalanced nutrition: less than body requirements
- Deficient knowledge about the treatment regimen

Implementation:

In effective airway clearance:

1- Assess respiratory status, including

A-vital signs: tachypnea

B-breath sounds; such as crackles, wheezes

C-skin color, cyanosis, reduced sa o2

2- Asses cough and sputum (amount, color, consistency, and possible odor).

3- Monitor ABC results, hypoxemia

- Blood gas changes may be an early indicator of impaired gas exchange due to airway narrowing or obstruction.

1- Place in Fowler's or high – Fowler's position, encourage frequent position changes and ambulation to facilitate the movement of secretion and promote lung expansion.

2- Assist to cough, deep breathe, and use assistive devices, provide endotracheal suctioning.

3- Provide a fluid intake of at least 2500 to 300 ml per day.

4- Work with physician and respiratory therapist to provide. Pulmonary hygiene such as postural drainage, percussion and vibration.

5- Administer prescribed medications as ordered.

In effective breathing pattern.

1- Provide for rest periods to reduce metabolic demands, fatigue, and the work of breathing

2- Provide reassurance during periods of respiratory distress because hypoxia and respiratory distress increase level of anxiety.

3- Administer oxygen as ordered

4- Teach slow abdominal breathing to promote lung expansion

5- teach of relaxation techniques

6- Provide analgesics as ordered to relief pain

Activity intolerance:

- assess activity tolerance; noting any increase in pulse, respirations, dyspnea, and cyanosis.

- assist with self care activities, such as bathing.

- Schedule activities, planning for rest periods.

- Provide assistive devices.

- Perform active or passive range of motion exercises.

- Provide emotional support and reassurance.

Evaluation

Expected Patient Outcomes

Expected patient outcomes may include the following:

1. Demonstrates improved airway patency, as evidenced by adequate oxygenation by pulse oximetry or arterial blood gas analysis, normal temperature, normal breath sounds, and effective coughing
2. Rests and conserves energy by limiting activities and remaining in bed while symptomatic and then slowly increasing activities
3. Maintains adequate hydration, as evidenced by an adequate fluid intake and urine output and normal skin turgor
4. Consumes adequate dietary intake, as evidenced by maintenance or increase in body weight without excess fluid gain
5. States explanation for management strategies
6. Complies with management strategies

With our best wishes

Dr: Sabah Said
Dr: Samah Elsayed
Dr: Eman Sobhy
Dr : Rasha Fathy
Dr: Marwa Mosaad