

Kevin's Review - 35 NCLEX Practice Questions

1. A 22-year-old client with quadriplegia is apprehensive and flushed, with a blood pressure of 210/100 and a heart rate of 50 bpm. Which of the following nursing interventions should be done first?

- A. Place the client flat in bed.
- B. Assess patency of the indwelling urinary catheter.
- C. Give one SL nitroglycerin tablet.
- D. Raise the head of the bed immediately to 90 degrees.

Correct Answer: D. Raise the head of the bed immediately to 90 degrees.

Anxiety, flushing above the level of the lesion, piloerection, hypertension, and bradycardia are symptoms of autonomic dysreflexia, typically caused by such noxious stimuli such as a full bladder, fecal impaction, or decubitus ulcer. Elevate head of bed to 45-degree angle or place patient in sitting position. Lowers BP to prevent intracranial hemorrhage, seizures, or even death. Note: Placing tetraplegic in sitting position automatically lowers BP.

- **Option A:** Putting the client flat will cause the blood pressure to increase even more. Identify and monitor precipitating risk factors (bladder and bowel distension or manipulation; bladder spasms, stones, infection; skin/tissue pressure areas, prolonged sitting position; temperature extremes or drafts). Visceral distention is the most common cause of autonomic dysreflexia, which is considered an emergency. Treatment of acute episodes must be carried out immediately (removing stimulus, treating unresolved symptoms), then interventions must be geared toward prevention.
- **Option B:** The indwelling urinary catheter should be assessed immediately after the HOB is raised. Eliminate causative stimulus as able such as bladder, bowel, skin pressure (including loosening tight leg bands or clothing, removing abdominal binder or elastic stockings); temperature extremes. Removing noxious stimulus usually terminates the episode and may prevent more serious autonomic dysreflexia (in the presence of sunburn, topical anesthetic should be applied).
- **Option C:** Nitroglycerin is given to reduce chest pain and reduce preload; it isn't used for hypertension or dysreflexia. Monitor BP frequently (every 3–5 min) during acute autonomic dysreflexia and take action to eliminate stimulus. Continue to monitor BP at intervals after symptoms subside. Aggressive therapy and removal of stimulus may drop BP rapidly, resulting in a hypotensive crisis, especially in those patients who routinely have low BP.

2. Mrs. Jordan is an elderly client diagnosed with Alzheimer's disease. She becomes agitated and combative when a nurse approaches to help with morning care. The most appropriate nursing intervention in this situation would be to:

- A. Tell the client firmly that it is time to get dressed.
- B. Obtain assistance to restrain the client for safety.
- C. Remain calm and talk quietly to the client.
- D. Call the doctor and request an order for sedation.

Correct Answer: C. Remain calm and talk quietly to the client.

Maintaining a calm approach when intervening with an agitated client is extremely important. Use a rather low voice and speak slowly to patients to increase the possibility of understanding. Divert

attention of the client when agitated or behaving dangerously like getting out of bed by climbing the fence bed to promote safety and prevent risk of injury.

- **Option A:** Telling the client firmly that it is time to get dressed may increase his agitation, especially if the nurse touches him. Avoid or terminate emotionally charged situations or conversations. Avoid anger and expectation of the patient to remember or follow instructions. Do not expect more than the patient is capable of doing. Catastrophic emotional responses are prompted by task failure when the patient feels expected to perform beyond ability and becomes frustrated and angry. Responding calmly to the patient validates feelings and causes less stress.
- **Option B:** Restraints are a last resort to ensure client safety and are inappropriate in this situation. Assess the patient for reversible or irreversible dementia, causes, ability to interpret environment, intellectual thought processes, memory loss, disturbances with orientation, behavior, and socialization. Determines type and extent of dementia to establish a plan of care to enhance cognition and emotional functioning at optimal levels.
- **Option D:** Sedation should be avoided, if possible, because it will interfere with CNS functioning and may contribute to the client's confusion. Maintain consistent scheduling with allowances for patient's specific needs, and avoid frustrating situations and overstimulation. Prevents patient agitation, erratic behaviors, and combative reactions. Scheduling may need revision to show respect for the patient's sense of worth and to facilitate completion of tasks.

3. The first thing that a nurse must ensure when the baby's head comes out is

- A. The cord is intact
- B. No part of the cord is encircling the baby's neck
- C. The cord is still attached to the placenta
- D. The cord is still pulsating

Correct Answer: B. No part of the cord is encircling the baby's neck

The nurse should check right away for possible cord coil around the neck because if it is present, the baby can be strangled by it and the fetal head will have difficulty being delivered.

- **Option A:** In a newborn who was born a few hours ago, the cord may look plump and pale yellow. One of the umbilical arteries may be visible and protruding from the cut edge. A normal cord has two arteries and one vein.
- **Option C:** The cord is expelled from the mother within a half-hour after birth. It is still attached to the placenta, which is commonly called "the afterbirth." With its function completed, it is no longer needed and so is discarded by the mother's body.
- **Option D:** Some cords may pulsate (the pulsation assists the transfer of your baby's blood back into their body) for as long as 30 minutes or more, where others may stop pulsating at 5 minutes or less after the baby is born.

4. Tamisha will be having her exam in pharmacology tomorrow. She should be aware that antitussive is indicated to:

- A. Encourage removal of secretions through coughing
- B. Relieve rhinitis

- C. Control a productive cough
- D. Relieve a dry cough

Correct Answer: D. Relieve a dry cough

An antitussive is a cough suppressant. Antitussives constitute a heterogeneous class of compounds that inhibit cough through either a central or a peripheral mechanism, or a mixture of the two. Antitussives are cough suppressants. There are two ways to inhibit coughing: centrally and peripherally. Choices A and C describe the action of an expectorant.

- **Option A:** Expectorant is a medication that helps bring up mucus and other material from the lungs, bronchi, and trachea. An example of an expectorant is guaifenesin, which promotes drainage of mucus from the lungs by thinning the mucus, and also lubricates the irritated respiratory tract.
- **Option B:** Decongestants are a type of medicine that can provide short-term relief for a blocked or stuffy nose (nasal congestion). They can help ease the symptoms of conditions such as colds and flu, hay fever and other allergic reactions, catarrh and sinusitis. They work by reducing the swelling of the blood vessels in the nose, which helps to open the airways.
- **Option C:** An expectorant is a type of cough medicine that thins and loosens mucus. These medications are typically used for managing the effects of chest congestion, especially when symptoms are caused by persistent mucus. Expectorants are designed to thin the respiratory secretions in the airways so that one can cough up excessive mucus more effectively. These medications do this by lubricating the airway passages.

5. Nurse Benjie is communicating with a male client with substance-induced persisting dementia; the client cannot remember facts and fills in the gaps with imaginary information. Nurse Benjie is aware that this is typical of?

- A. Flight of ideas
- B. Associative looseness
- C. Confabulation
- D. Concretism

Correct Answer: C. Confabulation

Confabulation or the filling in of memory gaps with imaginary facts is a defense mechanism used by people experiencing memory deficits. Confabulation is a type of memory error in which gaps in a person's memory are unconsciously filled with fabricated, misinterpreted, or distorted information. When someone confabulates, they are confusing things they have imagined with real memories. A person who is confabulating is not lying.

- **Option A:** A nearly continuous flow of accelerated speech with abrupt changes from topic to topic that are usually based on understandable associations, distracting stimuli, or plays on words. When severe, speech may be disorganized and incoherent. It is part of the DSM -5 criteria for Manic episodes.
- **Option B:** In cases of severely disordered thinking, thoughts lose almost all connections with one another and become disconnected and disjointed. This illogical thinking is called derailment or "loose" associations. In simple terms, the thinking process is frequently derailed, characterized by very weak or loose associations.

- **Option D:** In the analytic psychology of Carl Jung, a type of thought or feeling that depends on immediate physical sensation and displays little or no capacity for abstraction. In some traditional societies, such thinking may manifest itself in fetishism and belief in magic. In the modern world, it may display itself as an inability to think beyond the obvious material facts of a situation.

6. Which of the following nursing interventions should be included in the client's care plan during dialysis therapy?

- A. Limit the client's visitors.
- B. Monitor the client's blood pressure.
- C. Pad the side rails of the bed.
- D. Keep the client NPO.

Correct Answer: B. Monitor the client's blood pressure.

Because hypotension is a complication of peritoneal dialysis, the nurse records intake, and output, monitors VS, and observes the client's behavior. Monitor BP (lying and sitting) and pulse. Note level of jugular pulsation. Decreased BP, postural hypotension, and tachycardia are early signs of hypovolemia

- **Option A:** The nurse also encourages visiting and other diversional activities. Encourage use of relaxation techniques. Redirects attention and promotes a sense of control. Elevate head of bed at intervals. Turn the patient from side to side. Provide back care and tissue massage. Position changes and gentle massage may relieve abdominal and general muscle discomfort.
- **Option C:** A client on PD does not need to be placed in bed with padded side rails. Anchor catheter and tubing with tape. Stress the importance of the patient avoiding pulling or pushing on the catheter. Restrain hands if indicated. Reduces risk of trauma by manipulation of the catheter.
- **Option D:** A client on PD does not need to be kept NPO. Maintain nutritional status. Provide a high-calorie, low-protein, low-sodium, and low-potassium diet, with vitamin supplements to balance nutritional intake.

7. Which of the following substances is a natural hormone produced by the pineal gland that induces sleep?

- A. Amphetamine
- B. Melatonin
- C. Methylphenidate
- D. Pemoline

Correct Answer: B. Melatonin

Melatonin is a natural hormone that induces sleep. Melatonin is a hormone synthesized within the pineal gland from the amino acid tryptophan. Tryptophan is hydroxylated and then decarboxylated to form 5-hydroxytryptamine or serotonin. When there is sunlight, serotonin is stored within pinealocytes, making it unavailable to monoamine oxidase, the enzyme that converts serotonin to melatonin. All the others are medications classified as stimulants.

- **Option A:** Amphetamine is a central nervous (CNS) system stimulant that functions by increasing the amounts of dopamine, norepinephrine, and serotonin (to a lesser extent) in the synaptic cleft through a variety of mechanisms. Amphetamine is FDA-approved for the treatment of

attention-deficit/hyperactivity disorder (ADHD) and narcolepsy. It has indications as a first-line agent for ADHD in adults and children six years of age and older. Amphetamine is also a second-line agent for the treatment of narcolepsy.

- **Option C:** Methylphenidate is FDA-approved for treating attention deficit hyperactivity disorder (ADHD) in children and adults and as a second-line treatment for narcolepsy in adults. Methylphenidate blocks the reuptake of two neurotransmitters, norepinephrine (NE) and dopamine, by presynaptic neurons. More specifically, it inhibits the transporters of these neurotransmitters, increasing the concentration of dopamine and NE in the synaptic cleft.
- **Option D:** Pemoline is a stimulant drug of the 4-oxazolidinone class. It was first synthesized in 1913 but its activity was not discovered until the 1930s. Under the names Betanamin, Cylert, Tradon, and Ceractiv it was used as a medication to treat attention-deficit hyperactivity disorder (ADHD) and narcolepsy.

8. The client is receiving an eye ointment and an eye drop. The nurse instructs the client to?

- A. Administer the eye ointment first, followed by the eye drop.
- B. Administer the eye drop first, followed by the eye ointment.
- C. Administer the eye ointment, wait for 5 minutes then administer the eye drop.
- D. Administer the eye drop, wait for 10 minutes then administer the eye ointment.

Correct Answer: B. Administer the eye drop first, followed by the eye ointment.

- **Option B:** If both an eye drop and eye ointment are scheduled at the same time, administer the eye drop first; separate the installation by 3-5 minutes.

9. A client comes into the health clinic 3 years after undergoing resection of the terminal ileum complaining of weakness, shortness of breath, and a sore tongue. Which client statement indicates a need for intervention and client teaching?

- A. "I have been drinking plenty of fluids."
- B. "I have been gargling with warm salt water for my sore tongue."
- C. "I have 3 to 4 loose stools per day."
- D. "I take a vitamin B12 tablet every day."

Correct Answer: D. "I take a vitamin B12 tablet every day."

Vitamin B12 combines with intrinsic factor in the stomach and is then carried to the ileum, where it is absorbed in the bloodstream. In this situation, vitamin B12 cannot be absorbed regardless of the amount of oral intake of sources of vitamin B12 such as animal protein or vitamin B12 tablets. Vitamin B12 needs to be injected every month, because the ileum has been surgically removed.

- **Option A:** Replacement of fluids and electrolytes is important when the client has continuous multiple loose stools on a daily basis. Massive small bowel resection can lead to short bowel syndrome (SBS), a condition that is characterized by malnutrition and malabsorption secondary to loss of functional small bowel and more rapid intestinal transit. In addition to weight loss and protein-calorie malnutrition, patients suffer from diarrhea, steatorrhea, electrolyte abnormalities,

and deficiencies in fat-soluble vitamins.

- **Option B:** Warm salt water is used to soothe sore mucous membranes. Parenteral nutrition, therefore, is a mainstay of early SBS management to limit malnutrition. Early return to enteral feeds once ileus has resolved is advised, even if a diagnosis of SBS is expected. Enteral feeding is thought to stimulate intestinal adaptation by both directly stimulating enterocytes and by inducing endocrine and paracrine effects signaling for hypertrophy of the remaining small bowel mucosa.
- **Option C:** Crohn's disease and small bowel resection may cause several loose stools a day. Drugs such as loperamide, diphenoxylate and atropine, and opiates will slow gut function, increasing the potential absorptive time of enteral feeds. Reducing gastrointestinal secretion and controlling diarrhea are also important goals for maximizing absorption.

10. Kevin is a member of the Nursing Research Council of the hospital. His first assignment is to determine the level of patient satisfaction with the care they received from the hospital. He plans to include all adult patients admitted from April to May, with an average length of stay of 3-4 days, first admission, and with no complications. Which of the following is an extraneous variable of the study?

- A. Date of admission
- B. Length of stay
- C. Age of patients
- D. Absence of complications

Correct Answer: C. Age of patients

An extraneous variable is not the primary concern of the researcher but has an effect on the results of the study. Adult patients may be young, middle, or late adults. Extraneous variables are those that produce an association between two variables that are not causally related.

- **Option A:** The date of admission is an independent variable. An independent variable is a variable believed to affect the dependent variable. This is the variable that the researcher will manipulate to see if it makes the dependent variable change.
- **Option B:** The length of stay is an independent variable because it can also affect the dependent variable, which is the level of satisfaction of the patients. To reiterate, the independent variable is the thing over which the researcher has control and is manipulating.
- **Option D:** The absence of complications is another independent variable because it can also affect the level of satisfaction of the patients. The experiment's dependent variable is the ball throwing, which will hopefully change due to the independent variable. The scientific sentence is, 'You are going to manipulate an independent variable to see what happens to the dependent variable.'

11. The nurse finds a client sleep walking down the unit hallway. An appropriate intervention the nurse implements is:

- A. Asking the client what he or she is doing and calling for help.
- B. Quietly approaching the client and then loudly calling his or her name.
- C. Lightly tapping the client on the shoulder and leading him or her back to bed.

D. Blocking the hallway with chairs and seating the client.

Correct Answer: C. Lightly tapping the client on the shoulder and leading him or her back to bed.

The nurse should not startle the client but should gently awaken the client and lead him or her back to bed. Gently lead the person sleepwalking to bed. It's not necessary to wake up the person. Although it's not dangerous to the person to be awakened, it can be disruptive if he or she becomes confused and disoriented, and possibly agitated.

- **Option A:** It is unnecessary to startle the client awake. Establish a regular, relaxing routine before bedtime. Do quiet, calming activities before bed, such as reading books, doing puzzles, or soaking in a warm bath. Meditation or relaxation exercises may help, too. Make the bedroom comfortable and quiet for sleep.
- **Option B:** Loudly calling the client's name is inappropriate. Identify the issues that cause stress and ways to handle the stress. Talk about what's bothering the client. Or if the client sleepwalks and seems anxious or stressed, talk with him or her about any concerns.
- **Option D:** If sleepwalking has led to injuries or may do so, consider these precautions: close and lock all windows and exterior doors before bedtime; lock interior doors, or place alarms or bells on the doors. Block doorways or stairways with a gate, and move electrical cords and other tripping hazards out of the way.

12. When assessing a client for an abdominal aortic aneurysm, which area of the abdomen is most commonly palpated?

- A. Right upper quadrant
- B. Directly over the umbilicus
- C. Middle lower abdomen to the left of the midline
- D. Midline lower abdomen to the right of the midline

Correct Answer: C. Middle lower abdomen to the left of the midline

The aorta lies directly left of the umbilicus; therefore, any other region is inappropriate for palpation. The aortic pulse can be palpated just above and to the left of the umbilicus. The width of the aorta can then be measured by placing both hands palms down on the patient's abdomen, with one index finger on either side of the aorta. Each systole should move the fingers apart.

- **Option A:** The right upper quadrant is a little farther from the appropriate area to be palpated. Abdominal examination includes palpation of the aorta and estimation of the size of the aneurysm. AAAs are palpated in the upper abdomen; the aorta bifurcates into the iliac arteries just above the umbilicus.
- **Option B:** Palpating the umbilicus would yield inappropriate results. The examiner may palpate the periumbilical area for any defect, mass, or an umbilical hernia. The patient can be asked to cough or bear down to feel for any protruding mass.
- **Option D:** The aorta lies to the left, not the right, of the umbilicus. Left lower quadrant tenderness may be a presenting sign of diverticulitis in the elderly. A mass, if present may be due to a tumor of the colon, a left ovarian cyst, or ectopic pregnancy. In the elderly, constipation leading to impacted feces may also present with a mass palpated in the left lower quadrant.

13. Prior giving of methylergonovine (Methergine), what is the priority assessment for the nurse to check which of the following?

- A. Deep tendon reflexes
- B. Urine output
- C. Vaginal bleeding
- D. Blood pressure

Correct Answer: D. Blood pressure

Methylergonovine causes uterine contractions and can elevate the blood pressure, so the priority assessment for the nurse to take is to check the blood pressure first.

- **Options A, B, & C:** These are part of postpartum assessment but does not specifically relate to the administration of the medication.

14. A client seeks care because she feels depressed and has gained weight. To treat her atypical depression, the physician prescribes tranylcypromine sulfate (Parnate), 10 mg by mouth twice per day. When this drug is used to treat atypical depression, what is its onset of action?

- A. 1 to 2 days
- B. 3 to 5 days
- C. 6 to 8 days
- D. 10 to 14 days

Correct Answer: B. 3 to 5 days

Monoamine oxidase inhibitors, such as tranylcypromine, have an onset of action of approximately 3 to 5 days. A full clinical response may be delayed for 3 to 4 weeks. The therapeutic effects may continue for 1 to 2 weeks after discontinuation. When patients are prescribed antidepressants like MAOIs, they must be aware of the time it takes to start experiencing the therapeutic effects of the drug. Usually, the medication starts to become effective within two to three weeks.

- **Option A:** Patients should take the antidepressant for at least six months for the maximal therapeutic benefit. Patients that take an antidepressant for less than six months are shown to have a high rate of symptomatic relapse. Monoamine oxidase inhibitors (MAOIs) were first introduced in the 1950s. They are a separate class from other antidepressants, treating different forms of depression as well as other nervous system disorders such as panic disorder, social phobia, and depression with atypical features.
- **Option C:** Monoamine oxidase inhibitors are responsible for blocking the monoamine oxidase enzyme. The monoamine oxidase enzyme breaks down different types of neurotransmitters from the brain: norepinephrine, serotonin, dopamine, as well as tyramine. MAOIs inhibit the breakdown of these neurotransmitters thus, increasing their levels and allowing them to continue to influence the cells that have been affected by depression.
- **Option D:** There are two types of monoamine oxidase, A and B. The MOA A are mostly distributed in the placenta, gut, and liver, but MOA B is present in the brain, liver, and platelets. Serotonin and noradrenaline are substrates of MOA A, but phenylethylamine, methylhistamine, and tryptamine are substrates of MOA B. Dopamine and tyramine are metabolized by both MOA A and B.

Selegiline and rasagiline are irreversible and selective inhibitors of MAO type B, but safinamide is a reversible and selective MAO B inhibitor.

15. A male client is diagnosed with a schizotypal personality disorder. Which signs would this client exhibit during a social situation?

- A. Paranoid thoughts
- B. Emotional affect
- C. Independence need
- D. Aggressive behavior

Correct Answer: A. Paranoid thoughts

Clients with schizotypal personality disorder experience excessive social anxiety that can lead to paranoid thoughts. People with schizotypal personality disorder are often described as odd or eccentric and usually have few, if any, close relationships. They generally don't understand how relationships form or the impact of their behavior on others. They may also misinterpret others' motivations and behaviors and develop significant distrust of others. These problems may lead to severe anxiety and a tendency to avoid social situations, as the person with schizotypal personality disorder tends to hold peculiar beliefs and may have difficulty with responding appropriately to social cues.

- **Option B:** People with schizotypal personality disorder are loners who prefer to keep their distance from others and are uncomfortable being in relationships. They sometimes exhibit odd speech or behavior, and they have a limited or flat range of emotions. This pattern begins early in adulthood and continues throughout life. Those with this disorder also tend to have markedly illogical thinking, with unusual ideas or odd beliefs that are not consistent with prevailing ideas, for example, a strong belief in extrasensory perception (ESP). They may report unusual perceptions or strange body experiences.
- **Option C:** People with schizotypal personality disorder are loners who prefer to keep their distance from others and are uncomfortable being in relationships. They sometimes exhibit odd speech or behavior, and they have a limited or flat range of emotions. This pattern begins early in adulthood and continues throughout life.
- **Option D:** Many people with schizotypal personality disorder have subtle difficulties with memory, learning, and attention. They usually do not have the more severe and disabling psychotic symptoms, such as delusions and hallucinations that appear in schizophrenia. However, people with a schizotypal personality disorder do sometimes develop schizophrenia.

16. Which of the following ECG findings alerts the nurse that the client needs an antiarrhythmic?

- A. Normal sinus rhythm
- B. Sinus bradycardia
- C. Sinus arrhythmia
- D. Frequent ventricular ectopy

Correct Answer: D. Frequent ventricular ectopy

Ventricular ectopy can be a life-threatening arrhythmia; therefore, the client needs an arrhythmic. Frequent ventricular ectopy is a common clinical presentation in patients suffering idiopathic ventricular outflow tract arrhythmias. These are focal arrhythmias that generally occur in patients without structural heart disease and share a predilection for characteristic anatomic sites of origin. Other choices are not arrhythmias that need to be treated.

- **Option A:** Normal sinus rhythm is defined as the rhythm of a healthy heart. It means the electrical impulse from the sinus node is being properly transmitted. In adults, normal sinus rhythm usually accompanies a heart rate of 60 to 100 beats per minute.
- **Option B:** Sinus bradycardia can be defined as a sinus rhythm with a resting heart rate of 60 beats per minute or less. However, few patients actually become symptomatic until their heart rate drops to less than 50 beats per minute. Patients should have continuous cardiac monitoring and intravenous access. In patients with sinus bradycardia secondary to therapeutic use of digitalis, beta-blockers, or calcium channel blockers, simple discontinuation of the drug, along with monitored observation, are often all that is necessary. Occasionally, intravenous atropine and temporary pacing are required.
- **Option C:** Sinus arrhythmia is a commonly encountered variation of normal sinus rhythm. Sinus arrhythmia characteristically presents with an irregular rate in which the variation in the R-R interval is greater than 0.12 seconds. Additionally, P waves are typically monoform and in a pattern consistent with atrial activation originating from the sinus node. When present, sinus arrhythmia typically indicates good cardiovascular health.

17. Which of the following pathophysiological mechanisms that occur in the lung parenchyma allows pneumonia to develop?

- A. Atelectasis
- B. Bronchiectasis
- C. Effusion
- D. Inflammation

Correct Answer: D. Inflammation

The most common feature of all types of pneumonia is an inflammatory pulmonary response to the offending organism or agent. The resident macrophages serve to protect the lung from foreign pathogens. Ironically, the inflammatory reaction triggered by these very macrophages is what is responsible for the histopathological and clinical findings seen in pneumonia.

- **Option A:** Atelectasis indicates a collapse of a portion of the airway that doesn't occur with pneumonia. It is caused by the partial or complete, reversible collapse of the small airways resulting in an impaired exchange of CO₂ and O₂ – i.e., intrapulmonary shunt. The incidence of atelectasis in patients undergoing general anesthesia is 90%.
- **Option B:** Bronchiectasis is a chronic lung disease characterized by persistent and lifelong widening of the bronchial airways and weakening of the function mucociliary transport mechanism owing to repeated infection contributing to bacterial invasion and mucus pooling throughout the bronchial tree.
- **Option C:** An effusion is an accumulation of excess pleural fluid in the pleural space, which may be a secondary response to pneumonia. Accumulation of excess fluid can occur if there is excessive production or decreased absorption or both overwhelming the normal homeostatic mechanism. If pleural effusion is mainly due to mechanisms that lead to pleural effusion mainly due to increased hydrostatic pressure are usually transudative, and leading to pleural effusion have altered the

balance between hydrostatic and oncotic pressures (usually transudates), increased mesothelial and capillary permeability (usually exudates) or impaired lymphatic drainage.

18. The main indicator of the need for hemodialysis is:

- A. Ascites
- B. Acidosis
- C. Hypertension
- D. Hyperkalemia

Correct Answer: D. Hyperkalemia

It can be caused by reduced renal excretion, excessive intake or leakage of potassium from the intracellular space. In addition to acute and chronic renal failure, hypoaldosteronism, and massive tissue breakdown as in rhabdomyolysis, are typical conditions leading to hyperkalemia.

- **Option A:** The commonest cause of ascites in hemodialysis-dependent patients is nephrogenic followed by cardiac failure. Low serum albumin and low cardiac EF predispose to severe forms of ascites.
- **Option B:** In hemodialysis, the factors that can conceivably contribute to the worsening of metabolic acidosis include: low gain of bicarbonate in dialysis (caused by inadequate level of bicarbonate in the dialysate, inadequate dialysis schedule or absenteeism), high protein intake or gastrointestinal loss of bicarbonate.
- **Option C:** While hemodialysis lowers blood pressure (BP) in most hypertensive end-stage renal disease (ESRD) patients, some patients exhibit a paradoxical increase in BP during hemodialysis. This increase in BP during hemodialysis, termed intradialytic hypertension, has been recognized for many decades

19. The nurse manager is planning the clinical assignments for the day. Which staff members can be assigned to care for a client with herpes zoster? Select all that apply

- A. The nurse who never had German Measles.
- B. The nurse who never received the varicella zoster vaccine.
- C. The nurse who never had mumps.
- D. The nurse who never had roseola.
- E. The nurse who never had chicken pox.

Correct Answer: A, C, & D

Herpes zoster (shingles) is caused by a reactivation of the varicella-zoster virus, the causative virus for chickenpox. Individuals who have not been exposed to the varicella-zoster virus or who did not receive the varicella-zoster vaccine are susceptible to chickenpox. Health workers who are unsure of their immune status should have varicella titers done before exposure to a person with herpes zoster.

20. One aspect of implementation related to drug therapy is:

- A. Developing a content outline.
- B. Documenting drugs given.
- C. Establishing outcome criteria.
- D. Setting realistic client goals.

Correct Answer: B. Documenting drugs given.

Although documentation isn't a step in the nursing process, the nurse is legally required to document activities related to drug therapy, including the time of administration, the quantity, and the client's reaction. Developing a content outline, establishing outcome criteria, and setting realistic client goals are part of planning rather than implementation.

- **Option A:** UE has a common goal with the pharmaceutical care it supports: to improve an individual patient's quality of life through the achievement of predefined, medication-related therapeutic outcomes. Through its focus on the system of medication use, the MUE process helps to identify actual and potential medication-related problems, resolve actual medication-related problems, and prevent potential medication-related problems that could interfere with achieving optimum outcomes from medication therapy.
- **Option C:** Although distinctions historically have been made among the terms drug-use evaluation, drug-use review, and medication use evaluation (MUE), they all refer to the systematic evaluation of medication use employing standard, observational quality-improvement methods. MUE is a quality-improvement activity, but it also can be considered a formulary system management technique. An MUE is a performance improvement method that focuses on evaluating and improving medication-use processes with the goal of optimal patient outcomes.
- **Option D:** MUE encompasses the goals and objectives of drug use evaluation (DUE) in its broadest application, emphasizing improving patient outcomes. The use of MUE, rather than DUE, emphasizes the need for a more multifaceted approach to improving medication use.

21. He asserts the importance of promoting a positive organizational culture in their unit. Which of the following behaviors indicate that this is attained by the group?

- A. Proactive and caring with one another
- B. Competitive and perfectionist
- C. Powerful and oppositional
- D. Obedient and uncomplaining

Correct Answer: A. Proactive and caring with one another

Without a positive corporate culture, many employees will struggle to find the real value in their work, and this leads to a variety of negative consequences for the bottom line. Employers who invest in the well-being of their employees will be rewarded with happy, dedicated employees

- **Option B:** A positive culture gives an organization a competitive advantage. People want to work for companies with a good reputation from previous and current employees. A company with a positive culture will attract the type of talent that is willing to make their next workplace a home, rather than just a stepping-stone.
- **Option C:** Maintaining positive company culture is a guaranteed way to boost employee morale. Employees will naturally feel happier and enjoy their work more when they work in a positive

environment.

- **Option D:** Employees are much more likely to come together as a team at companies with a strong culture. A positive culture facilitates social interaction, teamwork, and open communication. This collaboration can lead to some amazing results.

22. On the other hand, Ms. Caputo notices that the Chief Nurse Executive has a charismatic leadership style. Which of the following behaviors best describes this style?

- A. Possesses inspirational quality that makes followers get attracted to him and regard him with reverence.
- B. Acts as he does because he expects that his behavior will yield positive results.
- C. Uses visioning as the core of his leadership.
- D. Matches his leadership style to the situation at hand.

Correct Answer: A. Possesses inspirational quality that makes followers gets attracted to him and regards him with reverence.

Charismatic leaders make the followers feel at ease in their presence. They feel that they are in good hands whenever the leader is around. The charismatic leadership style relies on the charm and persuasiveness of the leader. Charismatic leaders are driven by their convictions and commitment to their cause.

- **Option B:** The impoverished leader has the least concern for people and for production. This leader has no system of getting work done, nor is the work environment satisfying or motivating for employees. This leader's low interest in the work and the work environment results in disorganized work, dissatisfied employees, and a lack of harmony.
- **Option C:** In the transformational leadership style, the leader inspires his or her followers with a vision and then encourages and empowers them to achieve it. The leader also serves as a role model for the vision.
- **Option D:** With situational leadership, it is up to the leader to change his style, not the follower to adapt to the leader's style. In situational leadership, the style may change continually to meet the needs of others in the organization based on the situation.

23. Nurse Tamara is caring for a client diagnosed with bulimia. The most appropriate initial goal for a client diagnosed with bulimia is to:

- A. Avoid shopping for large amounts of food.
- B. Control eating impulses.
- C. Identify anxiety-causing situations.
- D. Eat only three meals per day.

Correct Answer: C. Identify anxiety-causing situations

Bulimic behavior is generally a maladaptive coping response to stress and underlying issues. The client must identify anxiety-causing situations that stimulate the bulimic behavior and then learn new ways of coping with the anxiety. Bulimia nervosa is a condition that occurs most commonly in adolescent

females, characterized by indulgence in binge-eating, and inappropriate compensatory behaviors to prevent weight gain.

- **Option A:** Controlling shopping for large amounts of food isn't a goal early in treatment. It is important to educate patients who abuse laxatives that these medications work in the gastrointestinal tract after the areas where caloric absorption has occurred primarily. It is crucial to inform patients that a period of edema and weight gain may follow up to several weeks after discontinuation of purging behavior.
- **Option B:** Managing eating impulses and replacing them with adaptive coping mechanisms can be integrated into the plan of care after initially addressing stress and underlying issues. The primary objective of treatment is a cessation of the bingeing and purging behavior. Selective serotonin reuptake inhibitors such as fluoxetine, citalopram, and sertraline have shown to reduce symptoms of bulimia nervosa. Fluoxetine is the only FDA approved medication for bulimia nervosa. It appears that a higher dose (60 mg) is significantly better than a placebo in decreasing the frequency of binge and vomiting episodes.
- **Option D:** Eating three meals per day isn't a realistic goal early in treatment. Patients with bulimia nervosa who purge by vomiting often brush their teeth immediately after purging, which can accelerate dental erosion. The clinician should instruct the patients who persist in vomiting to rinse their mouths with water or fluoride rather than brushing their teeth within 30 minutes of each episode. Consider consulting a dentist to address dental issues associated with vomiting.

24. You are acting as a preceptor for a newly graduated RN during her second week of orientation. You would assign the new RN under your supervision to provide care to which patients? Select all that apply.

- A. A 38-year old with moderate persistent asthma awaiting discharge.
- B. A 63-year old with a tracheostomy needing tracheostomy care every shift.
- C. A 56-year old with lung cancer who has just undergone left lower lobectomy.
- D. A 49-year old just admitted with a new diagnosis of esophageal cancer.

Correct Answer: A and B.

- **Option A:** A patient who is waiting for discharge may be stable enough for the care of the student nurse. The client is the center of care. The needs of the client must be competently met with the knowledge, skills and abilities of the staff to meet these needs.
- **Option B:** The new RN is at an early point in her orientation. The most appropriate patients to assign to her are those in stable condition who require routine care. In other words, the nurse who delegates aspects of care to other members of the nursing team must balance the needs of the client with the abilities of those to which the nurse is delegating tasks and aspects of care, among other things such as the scopes of practice and the policies and procedures within the particular healthcare facility.
- **Option C:** The patient with the lobectomy will require the care of a more experienced nurse, who will perform frequent assessments and monitoring for postoperative complications. Some needs require high levels of professional judgment and skill; and other patient needs are somewhat routine and without the need for high levels of professional judgment and skill.
- **Option D:** The patient admitted with newly diagnosed esophageal cancer will also benefit from care by an experienced nurse. This patient may have questions and needs a comprehensive admission assessment. As the new nurse advances through her orientation, you will want to work

with her in providing care for these patients with more complex needs.

25. David with paranoid schizophrenia repeatedly uses profanity during an activity therapy session. Which response by the nurse would be most appropriate?

- A. "Your behavior won't be tolerated. Go to your room immediately."
- B. "You're just doing this to get back at me for making you come to therapy."
- C. "Your cursing is interrupting the activity. Take time out in your room for 10 minutes."
- D. "I'm disappointed in you. You can't control yourself even for a few minutes."

Correct Answer: C. "Your cursing is interrupting the activity. Take time out in your room for 10 minutes."

The nurse should set limits on client behavior to ensure a comfortable environment for all clients. Maintain a consistent approach, employ consistent expectations, and provide a structured environment. Clear and consistent limits and expectations minimize the potential for the client's manipulation of staff.

- **Option A:** The nurse should accept hostile or quarrelsome client outbursts within limits without becoming personally offended. Use a calm and firm approach. This provides structure and control for a client who is out of control. Use short, simple, and brief explanations or statements. A short attention span limits understanding to small pieces of information.
- **Option B:** This is incorrect because it implies that the client's actions reflect feelings toward the staff instead of the client's own misery. Remain neutral as possible; Do not argue with the client. The client can use inconsistencies and value judgments as justification for arguing and escalating mania. Redirect agitation and potentially violent behaviors with physical outlets in an area of low stimulation (e.g., punching bag). This can help to relieve pent-up hostility and relieve muscle tension.
- **Option D:** Judgmental remarks may decrease the client's self-esteem. Maintain a firm, calm, and neutral approach at all times. These behaviors by the staff can escalate environmental stimulation and, consequently, manic activity. Once the manic client is out of control, seclusion might be required, which can be traumatic to the manic individual as well as the staff.

26. Which is a major concern when providing drug therapy for older adults?

- A. Older adults may chew on tablets instead of swallowing them
- B. Older adults have difficulty in swallowing large tablets
- C. Alcohol is used by older adults to cope with the multiple problems of aging
- D. Hepatic clearance is reduced in older adults

Correct Answer: D. Hepatic clearance is reduced in older adults.

Age-related changes such as a reduction in total liver size and decrease in hepatic blood flow would limit the exposure of the drug to the metabolizing enzymes resulting in reduced hepatic clearance of a drug increasing its side effects.

- **Option A:** Older adults may end up chewing tablets that will quickly release the effect of long-acting medications when crushed or the drug may not work properly however a physician may give smaller pills that will be easier to swallow or a liquid preparation may also be available.

- **Option B:** Older adults may experience difficulty taking tablets due to swallowing problems secondary to health conditions such as stroke, dementia, Parkinson's disease but there are other techniques to make swallowing pills easier (e.g. "pop bottle method").
- **Option C:** Alcohol is not used to cope with problems of aging since it can cause bad interactions with medications causing adverse effects. Aging can lower the body's tolerance for alcohol. Older adults generally experience the effects of alcohol more quickly than when they were younger. This puts older adults at higher risks for falls, car crashes, and other unintentional injuries that may result from drinking.

27. A 77-year-old male client is admitted with a diagnosis of dehydration and change in mental status. He's being hydrated with I.V. fluids. When the nurse takes his vital signs, she notes he has a fever of 103°F (39.4°C) a cough producing yellow sputum and pleuritic chest pain. The nurse suspects this client may have which of the following conditions?

- A. Adult respiratory distress syndrome (ARDS)
- B. Myocardial infarction (MI)
- C. Pneumonia
- D. Tuberculosis

Correct Answer: C. Pneumonia

Fever, productive cough, and pleuritic chest pain are common signs and symptoms of pneumonia.

- **Option A:** The client with ARDS has dyspnea and hypoxia with worsening hypoxia over time, if not treated aggressively.
- **Option B:** Pleuritic chest pain varies with respiration, unlike the constant chest pain during an MI; so this client most likely isn't having an MI.
- **Option D:** The client with TB typically has a cough producing blood-tinged sputum. A sputum culture should be obtained to confirm the nurse's suspicions.

28. When caring for Mr. Roberto's AV shunt on his right arm, you should:

- A. Cover the entire cannula with an elastic bandage.
- B. Notify the physician if a bruit and thrill are present.
- C. Use surgical aseptic technique when giving shunt care.
- D. Take the blood pressure on the right arm instead.

Correct Answer: C. Use surgical aseptic technique when giving shunt care.

Avoid contamination of access site. Use aseptic technique and masks when giving shunt care, applying or changing dressings, and when starting or completing dialysis process. Prevents the introduction of organisms that can cause infection.

- **Option A:** Assess skin around vascular access, noting redness, swelling, local warmth, exudate, tenderness. Signs of local infection, which can progress to sepsis if untreated. Monitor temperature. Note presence of fever, chills, hypotension; signs of infection, or sepsis requiring prompt medical intervention.

- **Option B:** Thrill is caused by turbulence of high-pressure arterial blood flow entering a low-pressure venous system and should be palpable above venous exit site. Bruit is the sound caused by the turbulence of arterial blood entering the venous system and should be audible by stethoscope, although may be very faint.
- **Option D:** Avoid trauma to shunt. Handle tubing gently, maintain cannula alignment. Limit activity of extremity. Avoid taking BP or drawing blood samples in shunt extremity. Instruct the patient not to sleep on the side with shunt or carry packages, books, purse on the affected extremity. Decreases risk of clotting and disconnection.

29. You are supervising an RN who was pulled from the medical-surgical floor to the emergency department. The nurse is providing care for a patient admitted with anterior epistaxis (nosebleed). Which of these directions would you clearly prove to the RN? Select all that apply.

- A. Position the patient supine and turned on his side.
- B. Apply direct lateral pressure to the nose for 5 minutes.
- C. Maintain universal body substances precautions.
- D. Apply ice or cool compresses to the nose.
- E. Instruct the patient not to blow the nose for several hours.

Correct Answers: B, C, D, and E.

Epistaxis (nasal bleeding) is relatively common but rarely fatal. Anterior bleeding is usually managed by digital pressure, gentle chemical cauterization, or nasal packing. Posterior bleeding, which is less common, is characterized by massive bleeding that's initially bilateral; this bleeding may be more difficult to control.

- **Option A:** Have the patient sit upright with her head tilted forward, and instruct her to apply direct external digital pressure to the nares with her index finger and thumb. The correct position for a patient with an anterior nosebleed is upright and leaning forward to prevent blood from entering the stomach and avoid aspiration. All of the other instructions are appropriate according to best practice for emergency care of a patient with an anterior nosebleed.
- **Option B:** Tell her to breathe through her mouth while she holds firm pressure on the soft flesh of her nose for at least 10 minutes. If bleeding persists, cotton pledgets soaked in a vasoconstrictor and anesthetic will be placed in the anterior nasal cavity, and direct pressure should be applied at both sides of the nose.
- **Option C:** Put on protective gear, including gown, gloves, and face shields. Provide an emesis basin and tissues. Tell her to spit blood into the basin if necessary. This helps prevent nausea and vomiting and lets you estimate the amount of bleeding.
- **Option D:** Cooling the nape of the neck is said to induce reflex constriction of the mucosal vessels of the nose, but there is no general agreement in the literature on the benefit of an ice pack as an adjuvant treatment of epistaxis.
- **Option E:** The nasal packing will be left in place for 3 to 5 days. Instruct the patient to avoid exerting herself, forcefully blowing her nose, or bending over. She should also avoid NSAIDs, alcoholic beverages, and smoking for 5 to 7 days. Tell her to apply water-soluble ointment to her lips and nostrils while packing is in place and to use a cool-mist room humidifier. Advise her to take steps to prevent constipation and straining, which increases the risk of bleeding.

30. A nurse is caring for a client who is taking digoxin (Lanoxin) 0.25mcg tab once a day. The client suddenly complains of anorexia, nausea, vomiting, and diarrhea. The physician is ruling a digoxin toxicity. As a nurse, you know the therapeutic digoxin rate is?

- A. 0.25-0.5 ng/ml
- B. 0.5-2 ng/ml
- C. 1.5-3 ng/ml
- D. 3.5-4.5 ng/ml

Correct Answer: B. 0.5-2 ng/ml

The therapeutic level of digoxin is 0.5-2 ng/ml. Levels of toxic concentrations are anything higher than 4.0 ng/mL. Signs and symptoms of digoxin toxicity include abdominal pain, anorexia, visual disturbances, nausea, vomiting, and arrhythmias.

31. The nurse is providing discharge instructions to a client following gastrectomy. Which measure will the nurse instruct the client to follow to assist in preventing dumping syndrome?

- A. Eat high-carbohydrate foods.
- B. Limit the fluids taken with meals.
- C. Ambulate following a meal.
- D. Sit in a high-Fowler's position during meals.

Correct Answer: B. Limit the fluids taken with meals.

The nurse should instruct the client to decrease the amount of fluid taken at meals and to take antispasmodics as prescribed. Discuss the importance of eating small, frequent meals slowly and in a relaxed atmosphere; resting after meals; avoiding extremely hot or cold food; restricting high-fiber foods, caffeine, milk products, and alcohol, excess sugars and salt; and taking fluids between meals, rather than with food.

- **Option A:** The nurse should instruct the client to avoid high carbohydrate foods including fluids such as fruit nectars. Review dietary needs and regimen (low-carbohydrate, low-fat, high-protein) and the importance of maintaining vitamin supplementation. This may prevent deficiencies, enhance healing, and promote cooperation with therapy. A low-fat diet may be required to reduce the risk of alkaline reflux gastritis.
- **Option C:** The nurse should instruct the client to lie down for 30 minutes after eating to delay gastric emptying. Identify symptoms that may indicate dumping syndrome, (weakness, profuse perspiration, epigastric fullness, nausea and vomiting, abdominal cramping, faintness, flushing, explosive diarrhea, and palpitations occurring within 15 min to 1 hr after eating).
Option D: The nurse should instruct the client to assume a low Fowler's position during meals. Avoid placing the patient in a supine position, have the patient sit upright after meals. Supine position after meals can increase regurgitation of acid. Instruct the patient to chew food thoroughly and eat slowly. Well-masticated food is easier to swallow. Food should be cut into small pieces.

32. The primary purpose of the Schilling test is to measure the client's ability to:

- A. Store vitamin B12
- B. Digest vitamin B12
- C. Absorb vitamin B12
- D. Produce vitamin B12

Correct Answer: C. Absorb vitamin B12

Pernicious anemia is caused by the body's inability to absorb vitamin B12. This results in a lack of intrinsic factor in the gastric juices. Schilling's test helps diagnose pernicious anemia by determining the client's ability to absorb vitamin B12. Patients presenting with signs and symptoms of cobalamin used to undergo this test. The most common features of vitamin-B12 deficiency include severe macrocytic anemia and variable neurologic abnormalities such as shuffling gait, with no improvement observed upon the administration of folic acid.

- **Option A:** In the systemic circulation, cobalamin binds with transporter protein termed transcobalamin II (TCII) and enters into the tissue with the receptor of transcobalamin II. Cobalamin has many cellular effects with the greatest impact on new blood cell generation and neurological function. At the cellular level, cobalamin acts as a cofactor of two enzymatic reactions that involve methionine synthase and methyl- malonyl-co A mutase.
- **Option B:** If cobalamin is not present in sufficient amounts, megaloblastic anemia occurs by inhibition of DNA synthesis due to the folate trap. Cobalamin (vitamin B12) in the form of adenosylcobalamin acts as a cofactor for enzyme methyl- malonyl-co A mutase, which converts methyl malonyl CoA to succinyl CoA. Through this reaction, it helps to metabolize odd chain fatty acids and branched chain amino acids.
- **Option D:** Vitamin B12 is naturally found in animal products, including fish, meat, poultry, eggs, milk, and milk products. Vitamin B12 is generally not present in plant foods, but fortified breakfast cereals are a readily available source of vitamin B12 with high bioavailability for vegetarians.

33. Five months after the incident the client complains of difficulty to concentrate, poor appetite, inability to sleep and guilt. She is likely suffering from:

- A. Adjustment disorder
- B. Somatoform Disorder
- C. Generalized Anxiety Disorder
- D. Post-traumatic disorder

Correct Answer: D. Post-traumatic disorder

Post-traumatic stress disorder is characterized by flashbacks, irritability, difficulty falling asleep, and concentrating following an extremely traumatic event. This lasts for more than one month. Posttraumatic stress disorder (PTSD) is a syndrome that results from exposure to real or threatened death, serious injury, or sexual assault. Following the traumatic event, PTSD is common and is one of the serious health concerns that is associated with comorbidity, functional impairment, and increased mortality with suicidal ideations and attempts.

- **Option A:** Adjustment disorder is the maladaptive reaction to stressful events characterized by anxiety, depression, and work or social impairments. This occurs within three (3) months after the event. Adjustment disorders involve markedly distressing and impairing emotional and/or

behavioral symptoms caused by an identifiable stressor.

- **Option B:** Somatoform disorders are anxiety-related disorders characterized by the presence of physical symptoms without a demonstrable organic basis. The somatoform disorders are a group of psychiatric disorders in which patients present with a myriad of clinically significant but unexplained physical symptoms. They include somatization disorder, undifferentiated somatoform disorder, hypochondriasis, conversion disorder, pain disorder, body dysmorphic disorder, and somatoform disorder not otherwise specified.
- **Option C:** Generalized anxiety disorder is characterized by chronic, excessive anxiety for at least 6 months. Generalized anxiety disorder is one of the most common mental disorders. Up to 20% of adults are affected by anxiety disorders each year. Generalized anxiety disorder produces fear, worry, and a constant feeling of being overwhelmed.

34. During a dermatological seminar at a nursing college, Professor Sinclair presented a case study of a 35-year-old musician who, after a minor injury to his finger while playing the guitar, developed a severe infection. This case led to a broader discussion about the significance of nail structures and their role in safeguarding the finger from infectious agents. Professor Sinclair posed a challenging question to the class: Amid the intricate architecture of the nail, which distinct structure acts as a sentinel, diligently warding off bacteria and detritus, thereby averting their infiltration into the interspace between the nail plate and the adjacent skin?

- A. Lunula
- B. Nail bed
- C. Eponychium
- D. Onychodermal Band

Correct Answer: C. Eponychium

Commonly referred to as the “cuticle,” the eponychium is the thin tissue layer that covers and protects the area where the nail plate meets the proximal skin of the finger. It acts as a barrier, preventing pathogens and debris from accessing and accumulating in the space under the nail.

- **Option A:** The lunula is the white, crescent-shaped area seen at the base of the nail. It’s the visible part of the nail matrix, where new nail cells are produced. While important for nail growth, the lunula does not directly act as a barrier against infections.
- **Option B:** The nail bed lies beneath the nail plate and provides nourishment to it. Though integral to nail health, it doesn’t act as the primary barrier against bacterial and debris entry.
- **Option D:** The onychodermal band, also known as the onychodermal eponychium or hyponychium, is the seal between the free edge of the nail and the skin of the fingertip. It helps in protection but is not the primary barrier where the nail plate meets the surrounding skin.

35. The following are interventions to make the fundus contract postpartally, except:

- A. Make the baby suck the breast regularly.
- B. Apply ice cap on fundus.

C. Massage the fundus vigorously for 15 minutes until contracted.

D. Give oxytocin as ordered.

Correct Answer: C. Massage the fundus vigorously for 15 minutes until contracted.

Massaging the fundus of the uterus should not be vigorous and should only be done until the uterus feels firm and contracted. If the massage is vigorous and prolonged, the uterus will relax due to overstimulation.

- **Option A:** If the woman breastfeeds, the hormone oxytocin is released, which causes the uterus to contract.
- **Option B:** Cooling the uterus by placing an icepack on the lower abdomen is one of the standard non-pharmacological prophylactic strategies to prevent PPH in Japan; the reasoning is that cold compresses may help to contract the myometrium and decrease blood loss. Cold therapy causes blood vessels within the smooth muscles to constrict, which subsequently decreases blood flow. Furthermore, blood vessels in the skin are affected by cold, resulting in somatovisceral reflex and subsequent vasoconstriction of relevant internal organs
- **Option D:** Prophylactic administration of oxytocin (Pitocin) reduces rates of postpartum hemorrhage by 40 percent; this reduction also occurs if oxytocin is given after placental delivery. Oxytocin is the drug of choice for preventing postpartum hemorrhage because it is at least as effective as ergot alkaloids or prostaglandins and has fewer side effects. Misoprostol (Cytotec) has a role in the prevention of postpartum hemorrhage; this agent has more side effects but is inexpensive, heat- and light-stable, and requires no syringes.