### **Kevin's Review - 35 NCLEX Practice Questions**

### 1. A 34-year-old woman is admitted for treatment of depression. Which of these symptoms would the nurse be least likely to find in the initial assessment?

- A. Inability to make decisions
- B. Feelings of hopelessness
- C. Family history of depression
- D. Increased interest in sex

#### Correct Answer: D. Increased interest in sex.

Interest in sex is markedly decreased in depression. The two "core" symptoms of depression are low mood and loss of interest in activities. In addition to those, people may also experience changes in appetite, trouble sleeping, tiredness, feelings of guilt, trouble concentrating, or thoughts of death. The symptoms of depression may be different in different people. So while one person may struggle to get out of bed, someone else might be able to go to work every day without coworkers noticing anything unusual.

- **Option A:** Indecisiveness and fear of being wrong are common in depression. Both major depressive disorder and persistent depressive disorder involve difficulty concentrating and making decisions. People with depression may recognize this in themselves, or others around them may notice that they're struggling to think clearly.
- **Option B:** Depression creates feelings that nothing will ever improve. A person with a depressed mood may report feeling sad or "empty," or may cry frequently. Having a low mood is one of the two core symptoms which is used to diagnose depression. People with PDD experience a depressed mood more days than not for at least two years. As with MDD, children with PDD may appear more irritable than depressed. However, for a PDD diagnosis, they must experience this for at least one year.
- **Option C:** The risk of depression is increased when there is a family history. A family history of depression is another significant risk factor. You are more likely to experience symptoms of depression if others in your family also have depression or another type of mood disorder. Estimates suggest that depression is approximately 40% determined by genetics.

### 2. Which of the following actions should the nurse take to use wide base support when assisting a client to get up in a chair?

- A. Bend at the waist and place arms under the client's arms and lift.
- B. Face the client, bend knees, and place hands-on client's forearm and lift.
- C. Spread his or her feet apart.
- D. Tighten his or her pelvic muscles.

#### Correct Answer: B. Face the client, bend knees, and place hands-on client's forearm and lift.

This is the proper way of supporting the client to get up in a chair that conforms to safety and proper body mechanics. It is important to use proper body mechanics as a health care professional for many reasons, foremost of which is to prevent injuries to both patient and provider. Health care professionals at the front line, especially those who deliver direct care to patients, are often in situations where they have to assist with moving patients from one position to another.

- **Option A:** Keep the back straight throughout the transfer to avoid bending or straining the back. Get as close to the person as possible while still allowing him/her to lean forward as needed to assist with the transfer.
- **Option C:** Allow the patient to help as much as possible. Estimate the patient's weight and mentally practice. Make sure that the floor is free of any obstacles or liquids. Keep your feet shoulder-width apart. Keep the person (or object) as close to your body as possible. Tighten your stomach muscles.
- **Option D:** Position patients appropriately for transfer. While standing in front of the patient, maintain proper posture with the back straight and knees bent. Hold a strong abdominal contraction. Position the body close to the patient to decrease strain on the back. Before movement, contract the abdominal muscles to protect the back. Use the knees and the lower body during transfer to decrease strain on the back.

### 3. What is the first intervention for a client experiencing MI?

- A. Administer morphine
- B. Administer oxygen
- C. Administer sublingual nitroglycerin
- D. Obtain an ECG

### Correct Answer: B. Administer oxygen

Administering supplemental oxygen to the client is the first priority of care. The myocardium is deprived of oxygen during an infarction, so additional oxygen is administered to assist in oxygenation and prevent further damage. Supplemental oxygen is indicated in patients with hypoxemia (SaO2 <90% or PaO2 <60mm Hg).

- **Option A:** The chest pain due to myocardial infarction is associated with sympathetic arousal, which causes vasoconstriction and increased workload for the ischemic heart. Intravenous opioids (e.g., morphine) are the analgesics most commonly used for pain relief (Class IIa).
- **Option C:** Nitro is also used to treat MI, but they're more commonly administered after the oxygen. Intravenous nitrates are more effective than sublingual nitrates with regard to symptom relief and regression of ST depression (NSTEMI). The dose is titrated upward until symptoms are relieved, blood pressure is normalized in hypertensive patients, or side effects such as a headache and hypotension are noted.
- **Option D:** An ECG is the most common diagnostic tool used to evaluate MI. The resting 12 lead ECG is the first-line diagnostic tool for the diagnosis of acute coronary syndrome (ACS). It should be obtained within 10 minutes of the patient's arrival in the emergency department. Acute MI is often associated with dynamic changes in the ECG waveform.

# 4. A male client with a history of hypertension is diagnosed with primary hyperaldosteronism. This diagnosis indicates that the client's hypertension is caused by excessive hormone secretion from which of the following glands?

- A. Adrenal medulla
- B. Pancreas
- C. Adrenal cortex

### D. Parathyroid

### Correct Answer: C. Adrenal cortex

Excessive secretion of aldosterone in the adrenal cortex is responsible for the client's hypertension. This hormone acts on the renal tubule, where it promotes reabsorption of sodium and excretion of potassium and hydrogen ions. Primary hyperaldosteronism (PA) is an underdiagnosed cause of hypertension. The classic presentation of PA includes hypertension and hypokalemia. However, in reality, most patients will present without hyperkalemia. The two primary causes are aldosterone-producing adenomas and bilateral adrenal hyperplasia of the zona glomerulosa.

- **Option A:** The adrenal medulla secretes the catecholamines epinephrine and norepinephrine. The adrenal gland is made up of the cortex and medulla. The cortex produces steroid hormones including glucocorticoids, mineralocorticoids, and adrenal androgens, and the medulla produces the catecholamines, epinephrine, and norepinephrine.
- **Option B:** The pancreas mainly secretes hormones involved in fuel metabolism. The pancreas is a composite organ, which has exocrine and endocrine functions. The endocrine portion is arranged as discrete islets of Langerhans, which are composed of five different endocrine cell types (alpha, beta, delta, epsilon, and upsilon) secreting at least five hormones including glucagon, insulin, somatostatin, ghrelin, and pancreatic polypeptide, respectively.
- **Option D:** The parathyroids secrete parathyroid hormone. The parathyroid is comprised of 4 small glands embedded in the posterior aspect of the thyroid gland. Its main function is the production and secretion of parathyroid hormone (PTH), a polypeptide hormone responsible for maintaining serum calcium homeostasis.

# 5. Charina, a college student who frequently visited the health center during the past year with multiple vague complaints of GI symptoms before course examinations. Although physical causes have been eliminated, the student continues to express her belief that she has a serious illness. These symptoms are typically of which of the following disorders?

- A. Conversion disorder
- B. Depersonalization
- C. Hypochondriasis
- D. Somatization disorder

### **Correct Answer: C. Hypochondriasis**

Hypochondriasis, in this case, is shown by the client's belief that she has a serious illness, although pathologic causes have been eliminated. The disturbance usually lasts at least 6 with identifiable life stressor such as, in this case, course examinations. Hypochondriasis, which is now known as illness anxiety disorder, and the other somatic symptom disorders (e.g., factitious disorder, conversion disorder) are among the most difficult and most complex psychiatric disorders to treat in the general medical setting. On the basis of many new developments in this field, the DMS-5 has revised diagnostic criteria to facilitate clinical care and research. While illness anxiety disorder is included in the category of "somatic symptom and related disorders" it continues to have much overlap with obsessive-compulsive disorder and related illness.

• **Option A:** Conversion disorders are characterized by one or more neurologic symptoms. Hypochondriasis, which is now known as illness anxiety disorder, and the other somatic symptom disorders (e.g., factitious disorder, conversion disorder) are among the most difficult and most complex psychiatric disorders to treat in the general medical setting. On the basis of many new developments in this field, the DMS-5 has revised diagnostic criteria to facilitate clinical care and research. While illness anxiety disorder is included in the category of "somatic symptom and related disorders" it continues to have much overlap with obsessive-compulsive disorder and related illness.

- **Option B:** Depersonalization refers to persistent recurrent episodes of feeling detached from one's self or body. Depersonalization is described as feeling disconnected or detached from one's self. Individuals may report feeling as if they are an outside observer of their own thoughts or body, and often report feeling a loss of control over their thoughts or actions.
- **Option D:** Somatoform disorders generally have a chronic course with few remissions. The Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition (DSM-5) category of Somatic Symptom Disorders and Other Related Disorders represents a group of disorders characterized by thoughts, feelings, or behaviors related to somatic symptoms. This category represents psychiatric conditions because the somatic symptoms are excessive for any medical disorder that may be present.

### 6. A client who is complaining of tinnitus is describing a symptom that is:

- A. Objective
- B. Subjective
- C. Functional
- C. Functional

### Correct Answer: B. Subjective.

A subjective symptom such as ringing in the ears can be felt only by the client. Subjective symptoms are those perceptible only to the patient. Examples of such sensory disturbances are pain, tenderness, fatigue, headache, nausea, vertigo, itching, tingling, and numbness. Pain and itching are pure subjective symptoms.

- **Option A:** Objective symptoms are those evident to the observer and called physical signs. Examples of such physical signs are temperature, pulse rate and rhythm, respiratory rate, and character, temperature, posture, edema, gait. Faint cardiac murmurs and pulmonary rales are pure objective signs.
- **Option C:** A functional symptom is a medical symptom with no known physical cause. In other words, there is no structural or pathologically defined disease to explain the symptom. The use of the term 'functional symptom' does not assume psychogenesis, only that the body is not functioning as expected.
- **Option D:** A prodrome can be the early precursor to an episode of a chronic neurological disorder such as a migraine headache or an epileptic seizure, where prodrome symptoms may include euphoria or other changes in mood, insomnia, abdominal sensations, disorientation, aphasia, or photosensitivity.

# 7. A patient with chronic obstructive pulmonary disease (COPD). Which intervention for airway management should you delegate to a nursing assistant?

A. Assisting the patient to sit up on the side of the bed.

- B. Instructing the patient to cough effectively.
- C. Teaching the patient to use incentive spirometry.
- D. Auscultation of breath sounds every 4 hours.

### Correct Answer: A. Assisting the patient to sit up on the side of the bed.

Assisting patients with positioning and activities of daily living is within the educational preparation and scope of practice of a nursing assistant. Some examples of tasks and aspects of care that can be delegated legally to nonprofessional, unlicensed assistive nursing personnel, provided they are competent in these areas, under the direct supervision of the nurse include assistance with transfers, range of motion, feeding, ambulation, and other tasks such as making beds and assisting with bowel and bladder functions.

- **Option B:** The staff members' levels of education, knowledge, past experiences, skills, abilities, and competencies are also evaluated and matched with the needs of all of the patients in the group of patients that will be cared for.
- **Option C:** Teaching, instructing, and assessing patients all require additional education and skills and are more appropriate for a licensed nurse. Based on the basic entry educational preparation differences among these members of the nursing team, care should be assigned according to the level of education of the particular team member.
- **Option D:** Among the tasks that cannot be legally and appropriately delegated to nonprofessional, unlicensed assistive nursing personnel, such as nursing assistants, patient care technicians, and personal care aides, include assessments, nursing diagnosis, establishing expected outcomes, evaluating care and any and all other tasks and aspects of care including but not limited to those that entail sterile technique, critical thinking, professional judgment, and professional knowledge.

### 8. Which of the following illnesses is the leading cause of death in the US?

- A. Cancer
- B. Coronary artery disease
- C. Liver failure
- D. Renal failure

### Correct Answer: B. Coronary artery disease

Coronary artery disease accounts for over 50% of all deaths in the US.

- Option A: Cancer accounts for approximately 20%.
- Option C: Liver failure accounts for less than 10% of all deaths in the US.
- **Option D:** Less than 10% of all deaths in the US can be attributed to renal failure.

# 9. A client with BPH is being treated with terazosin (Hytrin) 2 mg at bedtime. The nurse should monitor the client's:

- A. Urinary nitrites
- B. White blood cell count
- C. Blood pressure

### D. Pulse

### Correct Answer: C. Blood pressure

Terazosin (Hytrin) is an antihypertensive drug that is also used in the treatment of BPH. Blood pressure must be monitored to ensure that the client does not develop hypotension, syncope, or postural hypotension. The client should be instructed to change positions slowly. Statistically significant adverse effects associated with terazosin detected in placebo-controlled trials listed in the FDA database include dizziness, headache, weakness, postural hypotension, and nasal congestion.

- **Option A:** If used for lower urinary tract symptoms associated with benign prostatic hyperplasia, standard clinical assessment of patients may be used to determine efficacy. According to the FDA, post-marketing surveys also found priapism, atrial fibrillation, anaphylaxis, intraoperative floppy iris syndrome to be associated with terazosin use, though instances of such occurrences were extremely rare.
- **Option B:** The use of terazosin does not require plasma/blood drug level monitoring. Orthostatic vital signs should be obtained after the first dose to exclude postural hypotension. Overdose of terazosin may lead to hypotension, and standard life-support protocols should be in place for instances of hemodynamic instability.
- **Option D:** If used for hypertension, orthostatic blood pressures may be checked regularly during the titration interval to confirm efficacy. First-dose syncope is rare and may be mitigated by bedtime use. Orthostatic hypotension is common and should merit strong consideration when prescribing terazosin.

10. During a neurosurgery lecture, the professor shared a case of a 29-year-old male patient who was recently admitted following a severe motor vehicle accident. The patient suffered a penetrating head injury, leading to a foreign object breaching the cranial vault. The neuroimaging displayed a breach through various layers surrounding the brain. The professor utilizes this case to explain the layers of the meninges and their significance in safeguarding the central nervous system. The class is then quizzed about the identification of the meningeal layer which is the innermost and adheres closely to the surface of the brain and spinal cord, following the contours and folds of these structures, thereby serving as a protective barrier. Which of the following is the correct meningeal layer described?

- A. Arachnoid mater
- B. Pia mater
- C. Dura mater
- D. Tentorium cerebelli

### Correct Answer: B. Pia mater

The pia mater is the innermost layer of the meninges, a protective membrane system that surrounds the brain and spinal cord. It is a thin and delicate layer that adheres closely to the surface of the brain and spinal cord, providing support and protection while also facilitating the exchange of cerebrospinal fluid.

• **Option A:** The arachnoid mater is the middle layer of the meninges situated between the dura mater and the pia mater. It does not adhere closely to the brain or spinal cord surfaces and does

not follow the contours and folds of these structures. It instead forms a loosely fitting sac around them.

- **Option C:** The dura mater is the outermost layer of the meninges and is a thick, durable membrane. It does not adhere to the surface of the brain or spinal cord nor does it follow the contours and folds of these structures. Instead, it forms a tough protective coating with two sub-layers, creating a potential space known as the dural sinuses.
- **Option D:** The tentorium cerebelli is an extension of the dura mater that separates the cerebellum from the inferior portion of the occipital lobes. It is not a layer of the meninges and does not adhere to the surface of the brain or spinal cord.

# 11. A nurse is monitoring a client who is taking carvedilol (Coreg CR). Which of the following assessment made by the nurse would warrant a possible complication with the use of this medication?

A. Baseline blood pressure of 160/100 mm hg followed by a blood pressure of 120/70 mm hg after 3 doses.

- B. Baseline heart rate of 97 bpm followed by a heart rate of 62 bpm after 3 doses.
- C. Complaints of nightmares and insomnia.
- D. Complaints of dyspnea.

### Correct Answer: D. Complaints of dyspnea.

A complaint of dyspnea is a sign of bronchospasm which is one of the serious complications of beta-blockers.

- Options A & B: The following show a decrease in blood pressure and heart rate which are expected in this therapy.
- **Option C:** Complaints of nightmares and insomnia is a side effect of this medication.

### 12. The school nurse is asked which action will take to have the most impact on the incidence of infectious diseases in school. The correct response is:

- A. Grant written information about infection control to all parents.
- B. Ensure that students are immunized according to national guidelines.
- C. Make soap and water easily accessible in the classrooms.
- D. Educate students on how to cover their mouths when coughing.

#### Correct Answer: B. Ensure that students are immunized according to national guidelines.

The incidence of once-common infectious diseases like measles, chickenpox, and mumps has been most effectively reduced by immunization of all school-aged children. Infectious diseases that used to be common in children in the United States – including polio, diphtheria, pertussis (whooping cough), rubella (German measles), and chickenpox – are preventable with vaccines approved by the U.S. Food and Drug Administration (FDA).

• **Option A:** People are to be given information on the infectious disease hazards in their environment, the modes of transmission and appropriate control methods. This is best provided during induction and in ongoing training.

- **Option C:** Infectious disease can be spread via contaminated hands. Hand hygiene is one of the most important measures in preventing transmission of infection. Hands can become contaminated from touching contaminated surfaces or by being contaminated through coughing, sneezing, rubbing eyes etc. The infectious agent can then be passed on to others e.g. shaking hands and/or contaminating clean surfaces. Hand should be regularly washed with soap, running water and then dried.
- **Option D:** Respiratory hygiene is a set of routine practices to prevent potentially infectious secretions from the nose and mouth from contaminating others directly or indirectly via surfaces. Cough into a single use tissue or into the sleeve, never into the hands. Always turn to direct the cough away from others and away from surfaces or food sources.

### 13. Which of the following characteristics of contractions would the nurse expect to find in a client experiencing true labor?

- A. Occurring at irregular intervals.
- B. Starting mainly in the abdomen.
- C. Gradually increasing intervals.
- D. Increasing intensity with walking.

### Correct Answer: D. Increasing intensity with walking

With true labor, contractions increase in intensity with walking. In addition, true labor contractions occur at regular intervals, usually starting in the back and sweeping around to the abdomen. The interval of true labor contractions gradually shortens.

- **Option A:** Unlike false labor contractions or Braxton Hicks contractions, true labor contractions don't stop when you change your position or relax. It occurs at regular intervals.
- **Option B:** Labor contractions usually cause discomfort or a dull ache at the back and lower abdomen, along with pressure in the pelvis.
- **Option C:** True labor contractions come at regular intervals and get closer together as time goes on. (Contractions last about 30 to 70 seconds.).

### 14. A nurse is performing an assessment of a primipara who is being evaluated in a clinic during her second trimester of pregnancy. Which of the following indicates an abnormal physical finding necessitating further testing?

- A. Consistent increase in fundal height
- B. Fetal heart rate of 180 BPM
- C. Braxton Hicks contractions
- D. Quickening

#### Correct Answer: B. Fetal heart rate of 180 BPM.

The normal range of the fetal heart rate depends on gestational age. The heart rate is usually 160-170 BPM in the first trimester and slows with fetal growth, near and at term, the fetal heart rate ranges from 120-160 BPM. The other options are expected.

- **Option A:** A fundal height measurement is typically done to determine if a baby is small for its gestational age. The measurement is generally defined as the distance in centimeters from the pubic bone to the top of the uterus. The expectation is that after week 24 of pregnancy the fundal height for a normally growing baby will match the number of weeks of pregnancy plus or minus 2 centimeters.
- **Option C:** Braxton Hicks contractions are sporadic contractions and relaxation of the uterine muscle. Sometimes, they are referred to as prodromal or "false labor" pains. It is believed they start around 6 weeks gestation but usually are not felt until the second or third trimester of the pregnancy.
- **Option D:** Quickening often occurs between the 16th to the 22nd week of pregnancy. This is called a presumptive sign of pregnancy as the other movements of the woman's body can mimic early fetal movements such as flatus, peristalsis, and abdominal muscle contractions. A multiparous woman will usually first notice these fluttering movements of the fetus at an earlier gestation than a primiparous woman.

### 15. 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 treatment.
- C. Using a stethoscope for auscultating the fistula is contraindicated.
- D. Taking a blood pressure reading on the affected arm can cause clotting of the fistula.

### Correct Answer: D. Taking a blood pressure reading on the affected arm can cause clotting of the fistula.

Pressure on the fistula or the extremity can decrease blood flow and precipitate clotting, so avoid taking blood pressure on the affected arm. For the most effective hemodialysis, the patient needs good vascular access with an arteriovenous (AV) fistula or an AV graft that provides adequate blood flow. To prevent injuries, place an armband on the patient or a sign over the bed that says no BP measurements, venipunctures, or injections on the affected side. When blood flow through the vascular access is reduced, it can clot.

- **Option A:** Check the patient's circulation by palpating his pulses distal to the vascular access; observing capillary refill in his fingers; and assessing him for numbness, tingling, altered sensation, coldness, and pallor in the affected extremity.
- **Option B:** Auscultate the vascular access with a stethoscope to detect a bruit or "swishing" sound that indicates patency. Palpate the vascular access to feel for a thrill or vibration that indicates arterial and venous blood flow and patency.
- **Option C:** Assess the vascular access for signs and symptoms of infection such as redness, warmth, tenderness, purulent drainage, open sores, or swelling. Patients with end-stage kidney disease are at increased risk of infection.

### 16. Bicarbonate is lost during which of the following clinical conditions?

- A. Diarrhea
- B. Diuresis

- C. Diaphoresis
- D. Vomiting

### Correct Answer: A. Diarrhea

Bicarbonate is lost in diarrhea because the lower intestinal tract contains fluids rich in bicarbonate. In pathologies with profuse watery diarrhea, bicarbonate within the intestines is lost through the stool due to increased motility of the gut. This leads to further secretion of bicarbonate from the pancreas and intestinal mucosa, leading to net acidification of the blood from bicarbonate loss.

- **Option B:** Metabolic alkalosis occurs when a large volume of sodium-rich, bicarbonate low fluid is lost from the body. This occurs with diuretic use, cystic fibrosis, congenital chloride diarrhea, among others. The net concentration of bicarbonate increases as a result.
- **Option C:** The sweat duct also reabsorbs bicarbonate, either directly or through hydrogen ion secretion, but the specific mechanism is unknown. The activity of Na-K-ATPase is influenced by the hormonal control of aldosterone. Overall the rate of Na, Cl, and bicarbonate reabsorption is also flow-dependent, such that higher sweating rates are associated with proportionally lower reabsorption rates resulting in higher final sweat electrolyte concentrations
- **Option D:** Although vomiting induces gastric losses of acidic ions, there was no difference in serum bicarbonate concentrations between patients with and without vomiting. It is therefore likely that the reduction in serum bicarbonate concentration represents a true metabolic acidosis.

### 17. The drug/drugs used most commonly to treat peripheral or cerebral vascular obstructive disease is/are:

- A. pentoxifylline (Trental)
- B. cyclandelate (Cyclan)
- C. isoxsuprine (Vasodilan)
- D. All of the above

### Correct Answer: D. All of the above

All are vasodilators used primarily to treat peripheral or cerebral vascular obstructive disease. There are different classes of vasodilators used today in the current clinical practice, and each has different actions on the coronary arteries and peripheral vasculature (arteries and veins). Vasodilators most commonly affect the arteries in the human body, but some vasodilators (such as nitroglycerin) can affect the venous system of the body predominantly.

- **Option A:** Pentoxifylline (PTXF) is a vasoactive agent that improves the flow of blood by reducing its viscosity. Pentoxifylline and its metabolites decrease blood viscosity and improve the blood flow and peripheral tissue oxygenation.
- **Option B:** Cyclandelate belongs to the group of medicines commonly called vasodilators. These medicines increase the size of blood vessels. Cyclandelate is used to treat problems resulting from poor blood circulation.
- **Option C:** Isoxsuprine (Vasodilan) is a beta-adrenergic that directly affects the vascular smooth muscle and results in peripheral vascular dilation. Isoxsuprine relaxes the uterine smooth muscles and is used for the treatment of pre-term labor and dysmenorrhea.

### 18. What is the most common complication of an MI?

- A. Cardiogenic shock
- B. Heart failure
- C. Arrhythmias
- D. Pericarditis

### **Correct Answer: C. Arrhythmias**

Arrhythmias, caused by oxygen deprivation to the myocardium, are the most common complication of an MI. About 90% of patients who have an acute myocardial infarction (AMI) develop some form of cardiac arrhythmia during or immediately after the event. In 25% of patients, such rhythm abnormalities manifest within the first 24 hours. In this group of patients, the risk of serious arrhythmias, such as ventricular fibrillation, is greatest in the first hour and declines thereafter.

- **Option A:** Cardiogenic shock, another complication of an MI, is defined as the end stage of left ventricular dysfunction. This condition occurs in approximately 15% of clients with MI. Cardiogenic shock is a physiologic state in which inadequate tissue perfusion results from cardiac dysfunction, most often systolic. It is a major, and frequently fatal, complication of a variety of acute and chronic disorders, occurring most commonly following acute myocardial infarction (MI).
- **Option B:** Because the pumping function of the heart is compromised by an MI, heart failure is the second most common complication. Myocardial infarction (MI) remains the most common cause of heart failure (HF) worldwide. For almost 50 years HF has been recognized as a determinant of adverse prognosis after MI, but efforts to promote myocardial repair have failed to translate into clinical therapies.
- **Option D:** Pericarditis most commonly results from a bacterial or viral infection but may occur after the MI. Pericardial inflammation after myocardial infarction can be either acute seen after 3 to 10 days after large transmural myocardial infarction, termed as peri-infarction pericarditis, or immune-mediated inflammation after 1 to 8 weeks termed as post-myocardial infarction syndrome (Dressler syndrome). The pain of pericarditis may be confused as resulting from post-infarction angina or recurrent infarction.

# 19. Cely is experiencing alcohol withdrawal exhibits tremors, diaphoresis, and hyperactivity. Blood pressure is 190/87 mmHg and pulse is 92 bpm. Which of the medications would the nurse expect to administer?

- A. naloxone (Narcan)
- B. benztropine (Cogentin)
- C. lorazepam (Ativan)
- D. haloperidol (Haldol)

#### Correct Answer: C. lorazepam (Ativan)

The nurse would most likely administer benzodiazepine, such as lorazepam (ativan) to the client who is experiencing symptoms: The client's experiences symptoms of withdrawal because of the rebound phenomenon when the sedation of the CNS from alcohol begins to decrease. Lorazepam binds to benzodiazepine receptors on the postsynaptic GABA-A ligand-gated chloride channel neuron at several sites within the central nervous system (CNS). It enhances the inhibitory effects of GABA, which increases the conductance of chloride ions into the cell. This shift in chloride ions results in hyperpolarization and stabilization of the cellular plasma membrane. Its inhibitory action in the

amygdala helps with anxiety disorders, while its inhibitory action in the cerebral cortex helps in seizure disorders.

- **Option A:** Naloxone is indicated for the treatment of opioid toxicity, specifically to reverse respiratory depression from opioid use. It is useful in accidental or intentional overdose and acute or chronic toxicity. Common opioid overdoses treated with naloxone include heroin, fentanyl, carfentanil, hydrocodone, oxycodone, methadone, and others. Naloxone is a pure, competitive opioid antagonist with a high affinity for the mu-opioid receptor, allowing for reversal of the effects of opioids.
- **Option B:** Benztropine belongs to the synthetic class of muscarinic receptor antagonists (anticholinergic drug). Thus, it has a structure similar to that of diphenhydramine and atropine. However, it is long-acting so that its administration can be with less frequency than diphenhydramine. It also induces less CNS stimulation effect compared to that of trihexyphenidyl, making it a preferable drug of choice for geriatric patients.
- **Option D:** Haloperidol is a first-generation (typical) antipsychotic medication that is used widely around the world. Food and Drug Administration (FDA) approved the use of haloperidol is for schizophrenia, Tourette syndrome (control of tics and vocal utterances in adults and children), hyperactivity (which may present as impulsivity, difficulty maintaining attention, severe aggressivity, mood instability, and frustration intolerance), severe childhood behavioral problems (such as combative, explosive hyperexcitability), intractable hiccups. It is a typical antipsychotic because it works on positive symptoms of schizophrenia, such as hallucinations and delusions.

# 20. The client is arrogant and manipulative. In ensuring a therapeutic milieu, the nurse does one of the following:

- A. Agree on a consistent approach among the staff assigned to the client.
- B. Suggest that the client take a leading role in the social activities.
- C. Provide the client with extra time for one on one sessions.
- D. Allow the client to negotiate the plan of care.

### Correct Answer: A. Agree on a consistent approach among the staff assigned to the client.

A consistent firm approach is appropriate. This is a therapeutic way to handle attempts of exploiting the weakness in others or create conflicts among the staff. Bargaining should not be allowed. 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 B:** This is not therapeutic because the client tends to control and dominate others. Use a calm and firm approach. Provides structure and control for a client who is out of control.
- **Option C:** Limits are set for interaction time. Alert staff if a potential for seclusion appears imminent. Usual priority of interventions would be firmly setting limits. If nursing interventions (quiet environment and firm limit setting) and chemical restraints (tranquilizers–e.g., haloperidol [Haldol]) have not helped dampen escalating manic behaviors, then seclusion might be warranted.
- **Option D:** Allowing the client to negotiate, may reinforce manipulative behavior. 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.

# 21. When the nurse described the client as "that nasty old man in room 201," the nurse is exhibiting which ethical dilemma?

- A. Gender bias and ageism
- **B. HIPAA violation**
- C. Beneficence
- D. Code of ethics violation

### Correct Answer: A. Gender bias and ageism

Stereotyping an "old man" as "nasty" is a gender bias and an ageism issue. The nurse is verbalizing a negative descriptor about the client. Anyone who lives long enough is at risk of experiencing ageism. In Western, industrialized countries, older people are often perceived as unproductive and as using too much of society's resources (Gullette 2004). As countries' demographics shift toward larger percentages of older citizens (due to declines in birth rates and increases in longevity), aging is often framed in public policy debates as a social problem, and the hyperbolic language that is frequently used (e.g., "the gray tsunami") to describe shifting demographics contributes to ageism.

- **Option B:** The Health Insurance Portability and Accountability Act of 1996 is a landmark piece of legislation that was introduced to simplify the administration of healthcare, eliminate wastage, prevent healthcare fraud, and ensure that employees could maintain healthcare coverage when between jobs. A HIPAA violation is a failure to comply with any aspect of HIPAA standards and provisions detailed in 45 CFR Parts 160, 162, and 164.
- **Option C:** Beneficence is defined as an act of charity, mercy, and kindness with a strong connotation of doing good to others including moral obligation. All professionals have the foundational moral imperative of doing right.
- **Option D:** Serious ethical violations are acts that not only disregard codes of medical ethics, but also risk directly harming patients and subjecting the wrongdoer to criminal, tort, or medical board actions.

# 22. A 71-year-old woman with a history of recurrent fractures presents to the rheumatology clinic. Radiographic studies and bone mineral density tests confirm a diagnosis of advanced osteoporosis. The rheumatologist, considering the most effective pharmacological intervention to decelerate the progression of her bone deterioration, contemplates prescribing a specific class of medication. Which of the following medications is frequently recommended as a primary therapeutic agent for the management of osteoporosis?

- A. Agents primarily designed to supplement calcium levels.
- B. Nonsteroidal anti-inflammatory drugs (NSAIDs) typically used for pain and inflammation.
- C. Bisphosphonates, known for their role in inhibiting bone resorption.
- D. Anticoagulants, commonly used to prevent blood clot formation.
- **Option A:** Calcium supplements are often recommended to ensure adequate calcium intake but are not the primary medication for osteoporosis treatment.
- Options B & D: NSAIDs and anticoagulants are not specific to osteoporosis management.

# 23. The nurse just received the client's morning laboratory results. Which of these results is of most concern?

- A. Serum sodium level of 134 mEq/L
- B. Serum potassium level of 5.2 mEq/L
- C. Serum magnesium level of 0.8 mEq/L
- D. Serum calcium level of 10.6 mg/dL

### Correct Answer: C. Serum magnesium level of 0.8 mEq/L

With a magnesium level this low, the client is at risk for ECG changes and life-threatening ventricular dysrhythmias. Normal serum magnesium levels are between 1.46 and 2.68 mg/dL. Hypomagnesemia can be attributed to chronic disease, alcohol use disorder, gastrointestinal losses, renal losses, and other conditions. Signs and symptoms of hypomagnesemia include anything from mild tremors and generalized weakness to cardiac ischemia and death.

- **Option A:** Hyponatremia is defined as a serum sodium concentration of less than 135 mEq/L but can vary to some extent depending upon the set values of varied laboratories. Patients with mild-to-moderate hyponatremia (greater than 120 mEq/L) or gradual decrease in sodium (greater than 48 hours) have minimal symptoms.
- **Option B:** Hyperkalemia is defined as a serum or plasma potassium level above the upper limits of normal, usually greater than 5.0 mEq/L to 5.5 mEq/L. While mild hyperkalemia is usually asymptomatic, high levels of potassium may cause life-threatening cardiac arrhythmias, muscle weakness or paralysis.
- **Option D:** Hypercalcemia is defined as serum calcium concentration two standard deviations above the mean values. The normal serum calcium ranges from 8.8 mg/dL-10.8 mg/dL. Primary hyperparathyroidism and malignancy accounts for 90% of the cases of hypercalcemia.

# 24. If a client's prostate enlargement is caused by a malignancy, which of the following blood examinations should the nurse anticipate to assess whether metastasis has occurred?

- A. Serum creatinine level
- B. Serum acid phosphatase level
- C. Total nonprotein nitrogen level
- D. Endogenous creatinine clearance time

#### Correct Answer: B. Serum acid phosphatase level

The most specific examination to determine whether a malignancy extends outside of the prostatic capsule is a study of the serum acid phosphatase level. The level increases when a malignancy has metastasized. The prostate-specific antigen (PSA) determination and a digital rectal examination are done when screening for prostate cancer.

• **Option A:** Elevated serum creatinine levels and a decreased CrCl rate are usually indications for abnormal renal function. For these patients, it is recommended to perform a thorough history, physical exam, renal ultrasound, and urinalysis. Creatinine is a breakdown product of dietary meat and creatine phosphate found in skeletal muscle. Its production in the body is dependent on muscle mass.

- **Option C:** Total nonprotein nitrogen level gives information about kidney function, not prostate malignancy. The accumulation of nitrogenous compounds in the blood constitutes the most characteristic biochemical change of renal insufficiency. The degree of retention is variously expressed in terms of the concentration of blood urea, blood urea nitrogen (BUN), or nonprotein nitrogen (NPN), and this may occasionally cause confusion. The BUN, widely used in the United States, and the blood urea level, more frequently employed in Europe, can be used interchangeably (by using a conversion factor of 2:1). The NPN however cannot be accurately converted to BUN.
- **Option D:** Creatinine clearance (CrCl) is the volume of blood plasma cleared of creatinine per unit time. It is a rapid and cost-effective method for the measurement of renal function. A physician may require a creatinine clearance test from patients when routine blood creatinine levels or the estimated GFR are not within normal ranges.

# 25. The neonate of a mother with diabetes mellitus is prone to developing hypoglycemia because:

A. The pancreas is immature and unable to secrete the needed insulin.

B. There is rapid diminution of glucose level in the baby's circulating blood and his pancreas is normally secreting insulin.

C. The baby is reacting to the insulin given to the mother.

D. His kidneys are immature leading to a high tolerance for glucose.

### Correct Answer: B. There is rapid diminution of glucose level in the baby's circulating blood and his pancreas is normally secreting insulin.

If the mother is diabetic, the fetus while in utero has a high supply of glucose. When the baby is born and is now separate from the mother, it no longer receives a high dose of glucose from the mother. In the first few hours after delivery, the neonate usually does not feed yet thus this can lead to hypoglycemia.

- **Option A:** The primary function of ?-cells is to store and secrete insulin in response to glucose load. When ?-cells lose the ability to adequately sense blood glucose concentration, or to release sufficient insulin in response, this is classified as ?-cell dysfunction. ?-cell dysfunction is thought to be the result of prolonged, excessive insulin production in response to chronic fuel excess
- **Option C:** ?-cell dysfunction is exacerbated by insulin resistance. Reduced insulin-stimulated glucose uptake further contributes to hyperglycemia, overburdening the ?-cells, which have to produce additional insulin in response. The direct contribution of glucose to ?-cell failure is described as glucotoxicity. Thus, once ?-cell dysfunction begins, a vicious cycle of hyperglycemia, insulin resistance, and further ?-cell dysfunction is set in motion.
- **Option D:** Insulin resistance occurs when cells no longer adequately respond to insulin. At the molecular level, insulin resistance is usually a failure of insulin signaling, resulting in inadequate plasma membrane translocation of glucose transporter 4 (GLUT4)—the primary transporter that is responsible for bringing glucose into the cell to use as energy.

# 26. The client with confusion says to the nurse, "I haven't had anything to eat all day long. When are they going to bring breakfast?" The nurse saw the client in the day room eating breakfast with other clients 30 minutes before this conversation. Which response would be best for the nurse to make?

- A. "You know you had breakfast 30 minutes ago."
- B. "I am so sorry that they didn't get you breakfast. I'll report it to the charge nurse."
- C. "I'll get you some juice and toast. Would you like something else?"
- D. "You will have to wait a while; lunch will be here in a little while."

### Correct Answer: C. "I'll get you some juice and toast. Would you like something else?"

The client who is confused might forget that he ate earlier. Don't argue with the client. Simply get him something to eat that will satisfy him until lunch. Avoid challenging illogical thinking. Challenges to the patient's thinking can be perceived as threatening and result in a defensive reaction. Maintain normal fluid and electrolyte balance; establish/maintain normal nutrition, body temperature, oxygenation (if patients experience low oxygen saturation treat with supplemental oxygen), blood glucose levels, blood pressure.

- **Option A:** Orient patient to surroundings, staff, necessary activities as needed. Present reality concisely and briefly. Avoid challenging illogical thinking—defensive reactions may result. Increased orientation ensures a greater degree of safety for the patient.
- **Option B:** This statement is validating the delusion. Encourage family/SO(s) to participate in reorientation as well as providing ongoing input (e.g., current news and family happenings). The confused patient may not completely understand what is happening. The presence of family and significant others may enhance the patient's level of comfort.
- **Option D:** Communicate patient's status, cognition, and behavioral manifestations to all necessary providers. Recognize that a patient's fluctuating cognition and behavior is a hallmark for delirium and is not to be construed as a patient preference for caregivers.

# 27. While the postpartum client is receiving heparin for thrombophlebitis, which of the following drugs would the nurse expect to administer if the client develops complications related to heparin therapy?

- A. Calcium gluconate
- B. Protamine sulfate
- C. Methylergonovine (Methergine)
- D. Nitrofurantoin (Macrodantin)

#### **Correct Answer: B. Protamine sulfate**

Protamine sulfate is a heparin antagonist given intravenously to counteract bleeding complications caused by heparin overdose.

- **Option A:** Calcium gluconate is the calcium salt of gluconic acid, an intravenous medication used to treat conditions arising from calcium deficiencies such as hypocalcemic tetany and hypocalcemia.
- **Option C:** Methylergonovine is used to prevent or treat bleeding from the uterus that can happen after childbirth or an abortion.
- **Option D:** Nitrofurantoin is used to treat urinary tract infections. It is an antibiotic that works by killing bacteria that cause infection.

# 28. During the period of induction of labor, a client should be observed carefully for signs of:

- A. Severe pain
- B. Uterine tetany
- C. Hypoglycemia
- D. Umbilical cord prolapse

#### Correct Answer: B. Uterine tetany.

Uterine tetany could result from the use of oxytocin to induce labor. Because oxytocin promotes powerful uterine contractions, uterine tetany may occur. The oxytocin infusion must be stopped to prevent uterine rupture and fetal compromise.

- **Option A:** Women being offered induction of labor should be informed that induced labor is likely to be more painful than spontaneous labor. During the induction of labor, healthcare professionals should provide women with the pain relief appropriate for them and their pain.
- **Option C:** Since people with GDM and their babies are at increased risk of pregnancy complications, some care providers encourage women with GDM to plan an early birth (usually elective induction) at or near term instead of waiting for labor to start on its own.
- **Option D:** Umbilical cord prolapse is an uncommon but potentially fatal obstetric emergency. When this occurs during labor or delivery the prolapsed cord is compressed between the fetal presenting part and the cervix. This can result in a loss of oxygen to the fetus, and may even result in a stillbirth.

# 29. Which of the following treatments is a suitable surgical intervention for a client with unstable angina?

- A. Cardiac catheterization
- B. Echocardiogram
- C. Nitroglycerin
- D. Percutaneous transluminal coronary angioplasty (PTCA)

### Correct Answer: D. Percutaneous transluminal coronary angioplasty (PTCA)

PTCA can alleviate the blockage and restore blood flow and oxygenation.

- **Option A:** Cardiac catheterization is a diagnostic tool not a treatment. It is a procedure used to diagnose and treat certain cardiovascular conditions.
- **Option B:** An echocardiogram is a non-invasive diagnostic test. It is a graphic outline of the heart's movement.
- **Option C:** Nitroglycerin is an oral sublingual medication. It is a vasodilatory drug used primarily to provide relief from anginal chest pain.

# 30. A client, age 22, is admitted with bacterial meningitis. Which hospital room would be the best choice for this client?

- A. A private room down the hall from the nurses' station.
- B. An isolation room three doors from the nurses' station.
- C. A semi-private room with a 32-year-old client who has viral meningitis.
- D. A two-bedroom with a client who previously had bacterial meningitis.

### Correct Answer: B. An isolation room three doors from the nurses' station

A client with bacterial meningitis should be kept in isolation for at least 24 hours after admission. Patients suspected of having meningococcal meningitis should be placed in droplet precautions until they have received 24 hours of antibiotics. Close contacts should also be treated prophylactically. Ciprofloxacin, rifampin, or ceftriaxone may be used. Close contacts are defined as people within 3 feet of the patient for more than 8 hours during the seven days before and 24 hours after receiving antibiotics. People exposed to the patient's oral secretions during this time should also be treated.

- **Option A:** During the initial acute phase, should be as close to the nurses' station as possible to allow maximal observation. The mortality for bacterial meningitis varies from 10-15%. Survival depends on early recognition of acute bacterial meningitis, followed by administration of appropriate antibiotic therapy. Delay in treatment can result in increased intracranial pressure causing decreased cerebral perfusion and may rapidly lead to loss of consciousness and death.
- **Option C:** Placing the client in a room with a client who has viral meningitis may cause harm to both clients because the organisms causing viral and bacterial meningitis differ; either client may contract the other's disease. These patients need inpatient treatment until all symptoms have disappeared, therefore the nursing staff will be responsible for administration as well as monitoring for therapeutic effectiveness and adverse drug events, reporting any concerns to the team.
- **Option D:** Immunity to Bacterial meningitis can't be acquired; therefore, a client who previously had bacterial meningitis shouldn't be put at risk by rooming with a client who has just been diagnosed with this disease. Vaccines are available to help prevent bacterial meningitis. Children can get a meningitis vaccine around ages 11 to 12, followed by a booster vaccine at age 16. Bacterial meningitis is more common in infants under 1 year of age and young people ages 16 to 21.

# 31. Upon assessment, the nurse found the following: fundus at 2 fingerbreadths above the umbilicus, last menstrual period (LMP) 5 months ago, fetal heartbeat (FHB) not appreciated. Which of the following is the most possible diagnosis of this condition?

- A. Hydatidiform mole
- B. Missed abortion
- C. Pelvic inflammatory disease
- D. Ectopic pregnancy

#### Correct Answer: A. Hydatidiform mole

Hydatidiform mole begins as a pregnancy but early in the development of the embryo degeneration occurs. The proliferation of the vesicle-like substances is rapid causing the uterus to enlarge bigger than the expected size based on ages of gestation (AOG). In the situation given, the pregnancy is only 5 months but the size of the uterus is already above the umbilicus which is compatible with 7 months AOG. Also, no fetal heartbeat is appreciated because the pregnancy degenerated thus there is no appreciable fetal heartbeat.

- **Option B:** A missed abortion is a nonviable intrauterine pregnancy that has been retained within the uterus without spontaneous abortion. Typically, no symptoms exist besides amenorrhea, and the patient finds out that the pregnancy stopped developing earlier when a fetal heartbeat is not observed or heard at the appropriate time. An ultrasound usually confirms the diagnosis.
- **Option C:** Pelvic inflammatory disease (PID) is an infection of one or more of the upper reproductive organs, including the uterus, fallopian tubes, and ovaries. Untreated PID can cause scar tissue and pockets of infected fluid (abscesses) to develop in the reproductive tract, which can cause permanent damage.
- **Option D:** An ectopic pregnancy is when a fertilized egg implants itself outside of the womb, usually in one of the fallopian tubes. The fallopian tubes are the tubes connecting the ovaries to the womb. If an egg gets stuck in them, it won't develop into a baby and the mother's health may be at risk if the pregnancy continues.

### 32. Which nursing response is an example of the nontherapeutic communication block of requesting an explanation?

- A. "Can you tell me why you said that?"
- B. "Keep your chin up. I'll explain the procedure to you."
- C. "There is always an explanation for both good and bad behaviors."
- D. "Are you not understanding the explanation I provided?"

### Correct Answer: A. "Can you tell me why you said that?"

This nursing statement is an example of the nontherapeutic communication block of requesting an explanation. Requesting an explanation is when the client is asked to provide the reason for thoughts, feelings, behaviors, and events. Asking "why" a client did something or feels a certain way can be very intimidating and implies that the client must defend his or her behavior or feelings.

- **Option B:** Stereotyped comments refer to offering meaningless cliches or trite comments. Social conversations contain many cliches and much meaningless chit-chat. Such comments are of no value in the nurse-client relationship. Any automatic responses will lack the nurse's consideration or thoughtfulness.
- **Option C:** Attempts to dispel the client's anxiety by implying that there is not sufficient reason for concern completely devalue the client's feelings. Vague reassurances without accompanying facts are meaningless to the client.
- **Option D:** Interpreting refers to making conscious that which is unconscious to the client. The client's thoughts and feelings are his own, not to be interpreted by the nurse or for hidden meaning. Only the client can identify or confirm the presence of feelings.

# 33. The classic symptoms that define breast cancer includes the following except:

- A. Solitary, irregularly shaped mass
- B. "Pink peel" skin
- C. Firm, nontender, nonmobile mass
- D. Abnormal discharge from the nipple

### Correct Answer: B. "Pink peel" skin

- **Options D:** Pink peel skin is a symptom of breast cancer but it can also be seen with other conditions such as eczema, contact dermatitis, or scarlet fever.
- **Options A, C, and D:** Classic symptoms that define breast cancer include: Firm, nontender, nonmobile mass. Solitary, irregularly shaped mass. Adherence to muscle or skin causing dimpling effect. Involvement of the upper outer quadrant or central nipple portion. Asymmetry of the breasts. "Orange peel" skin. Retraction of nipple. Abnormal discharge from nipple.

34. A 45-year-old woman presents to the emergency department (ED) with complaints of fatigue, muscle weakness, and recent episodes of abdominal pain. On further inquiry, she also mentions frequent urination, bone pain, and having felt a palpable "stone" while urinating last week. The ED physician is concerned about the possibility of hyperparathyroidism, considering the symptoms described. Recognizing the link between the parathyroid hormone and its effect on serum electrolytes, the nurse anticipates specific laboratory investigations to confirm the diagnosis. Select all that apply

- A. Sodium
- B. Calcium
- C. Chloride
- D. Potassium
- E. Phosphorus

### Correct Answer: B and E.

Increased levels of PTH, as seen in hyperparathyroidism, lead to increased calcium levels in the blood (hypercalcemia). This occurs because PTH stimulates the release of calcium from bones, increases calcium absorption from the gut, and promotes calcium reabsorption in the kidneys. In hyperparathyroidism, there's an increase in PTH which leads to decreased phosphorus levels (hypophosphatemia). This is because PTH decreases the reabsorption of phosphorus in the kidneys, leading to increased phosphorus excretion in the urine. Additionally, PTH reduces the absorption of phosphorus from the intestines.

- **Option A:** The parathyroid hormone (PTH) primarily regulates calcium and phosphorus balance in the body. PTH does not directly influence sodium levels, so sodium levels are not typically altered in hyperparathyroidism.
- **Option C:** Chloride levels are not directly affected by PTH. However, in some cases of hyperparathyroidism, a rise in chloride may be seen in association with a rise in serum calcium. Still, the primary electrolyte derangements in hyperparathyroidism are with calcium and phosphorus.
- **Option D:** PTH does not have a direct effect on potassium levels, so it's not typically altered in hyperparathyroidism.

# 35. The nurse instructs a client with renal failure who is receiving hemodialysis about dietary modifications. The nurse determines that the client understands these dietary modifications if the client selects which items from the dietary menu?

- A. Mushroom and blueberry.
- B. Beans and bananas.
- C. Fish and tomato juice.
- D. Potato and spinach.

### Correct Answer: A. Mushroom and blueberry.

A renal diet is one that is low in sodium, phosphorus, potassium and protein. A renal diet also emphasizes the importance of consuming high-quality protein and usually limiting fluids. Some patients may also need to limit potassium and calcium. Every person's body is different, and therefore, it is crucial that each patient works with a renal dietitian to come up with a diet that is tailored to the patient's needs.

- **Option B:** Bananas are rich in potassium. The kidneys help to keep the right amount of potassium in the body and they expel excess amounts into the urine. When the kidneys fail, they can no longer remove excess potassium, so potassium levels build up in the body.
- **Option C:** Tomato juice is high in sodium. Too much sodium can be harmful for people with kidney disease because their kidneys cannot adequately eliminate excess sodium and fluid from the body. Processed foods often contain higher levels of sodium due to added salt.
- **Option D:** Potatoes and spinach are high in potassium. Potassium plays a role in keeping the heartbeat regular and the muscles working correctly. Potassium is also necessary for maintaining fluid and electrolyte balance in the bloodstream. When the kidneys fail, they can no longer remove excess potassium, so potassium levels build up in the body.