

# Kevin's Review - 85 NCLEX Practice Questions

**1. A client admitted with angina complains of severe chest pain and suddenly becomes unresponsive. After establishing unresponsiveness, which of the following actions should the nurse take first?**

- A. Activate the resuscitation team.
- B. Open the client's airway.
- C. Check for breathing.
- D. Check for signs of circulation.

**Correct Answer: A. Activate the resuscitation team.**

Immediately after establishing unresponsiveness, the nurse should activate the resuscitation team. The next step is to open the airway using the head-tilt, chin-lift maneuver and check for breathing (looking, listening, and feeling for no more than 10-seconds). If the client isn't breathing, give two slow breaths using a bag mask or pocket mask. Next, check for signs of circulation by palpating the carotid pulse.

- **Option B:** The initial step in the evaluation of an unconscious patient is to evaluate for the basic signs of life. The American Heart Association recommends examining for a pulse, followed by assessing for airway patency and breathing pattern. If the patient does not have a pulse or does not have a regular breathing pattern, basic life support/advanced cardiovascular life support is indicated.
- **Option C:** For patients with a pulse, who are breathing adequately, the evaluation shifts to a detailed neurological examination. The neurologic examination would serve to determine the location and nature of the neurological lesion and to determine prognosis.
- **Option D:** The initial step is to evaluate for reactivity, using objective measures. Address the patient verbally, and then progress to light shaking, then progress to more intense mechanical stimulation. Sufficient stimulus to the supraorbital ridge, nail beds, or temporomandibular joint can be painful without risk of tissue injury.

**2. A nurse prepares a list of home care instructions for the parents of a child who has a plaster cast applied to the left forearm. Choose the instructions that would be included on the list. Select all that apply.**

- A. Use the fingertips to lift the cast while it is drying.
- B. Keep small toys and sharp objects away from the cast.
- C. Use a padded ruler or another padded object to scratch the skin under the cast if it itches.
- D. Place a heating pad on the lower end of the cast and over the fingers if the fingers feel cold.
- E. Contact the health care provider if the child complains of numbness or tingling in the extremity.
- F. Elevate the extremity on pillows for the first 24 to 48 hours after casting to prevent swelling.

**Correct Answer: B, E, & F.**

Casts and splints support and protect injured bones and soft tissue. Casts and splints hold the bones in place while they heal. They also reduce pain, swelling, and muscle spasm. In some cases, splints and casts are applied following surgery.

- **Option A:** While the cast is drying, the palms of the hands are used to lift the cast. If the fingertips are used, indentations in the cast could occur and cause constant pressure on the underlying skin.

- **Option B:** Small toys and sharp objects are kept away from the cast. Keep dirt, sand, and powder away from the inside of the splint or cast. Inspect the skin around the cast. If the skin becomes red or raw around the cast, contact the doctor.
- **Option C:** No objects (including padded objects) are placed inside of the cast because of the risk of altered skin integrity. Do not stick objects such as coat hangers inside the splint or cast to scratch itching skin. Do not apply powders or deodorants to itching skin.
- **Option D:** A heating pad is not applied to the cast or fingers. Cold fingers could indicate neurovascular impairment, and the HCP should be notified. Numbness and tingling in the hand or foot may be caused by too much pressure on the nerves.
- **Option E:** The extremity is elevated to prevent swelling, and the HCP is notified immediately if any signs of neurovascular impairment develop. Prop the injured arm or leg up above your heart by putting it on pillows or some other support. The client will have to recline if the splint or cast is on the leg. Elevation allows clear fluid and blood to drain “downhill” to the heart.

**3. A male client with cholelithiasis has a gallstone lodged in the common bile duct. When assessing this client, the nurse expects to note:**

- A. Yellow sclera
- B. Light amber urine
- C. Circumoral pallor
- D. Black, tarry stools

**Correct Answer: A. Yellow sclera**

Yellow sclera may be the first sign of jaundice, which occurs when the common bile duct is obstructed. Jaundice can be a sign of a common bile duct obstruction from an entrapped gallstone. In the presence of jaundice and abdominal pain, often, a procedure is an indication to go and retrieve the stone to prevent further sequelae.

- **Option B:** Urine normally is light amber. Usually, patients with symptoms from gallstones present with right upper abdominal pain after eating greasy or spicy foods. There is often nausea and vomiting. Pain can also be present in the epigastric area that radiates to the right scapula or mid-back.
- **Option C:** Circumoral pallor doesn't occur in common bile duct obstruction; it is a sign of hypoxia, respectively. The classic physical exam finding is a positive Murphy's sign, where the pain is elicited on deep palpation to the right upper quadrant underneath the rib cage upon deep inspiration.
- **Option D:** Black, tarry stools don't occur in common bile duct obstruction; they are signs of GI bleeding. Progression of this condition is indicated by neurologic changes and hypotension (Reynold's pentad). Other sequelae are acute pancreatitis with symptoms of midepigastic pain and intractable vomiting.

**4. If a client requires a pneumonectomy, what fills the area of the thoracic cavity?**

- A. The space remains filled with air only.
- B. The surgeon fills the space with a gel.

- C. Serous fluids fill the space and consolidate the region.
- D. The tissue from the other lung grows over to the other side.

**Correct Answer: C. Serous fluids fill the space and consolidate the region**

Serous fluid fills the space and eventually consolidates, preventing extensive mediastinal shift of the heart and remaining lung.

- **Option A:** Air can't be left in space. Air in the chest cavity is called a pneumothorax, and it may cause the lungs to collapse.
- **Option B:** There's no gel that can be placed in the pleural space. The pleural cavity is the space that lies between the pleura, the two thin membranes that line and surround the lungs. It contains a small amount of liquid known as pleural fluid.
- **Option D:** The tissue from the other lung can't cross the mediastinum, although a temporary mediastinal shift exists until space is filled.

**5. The nurse is completing an assessment history of a client with pernicious anemia. Which complaint differentiates pernicious anemia from other types of anemia?**

- A. Difficulty in breathing after exertion
- B. Numbness and tingling in the extremities
- C. A faster-than-usual heart rate
- D. Feelings of lightheadedness

**Correct Answer: B. Numbness and tingling in the extremities**

- **Option B:** Pernicious anemia is a condition where there is a vitamin B12 deficiency. A deficiency may lead to nerve damage. This can cause numbness and tingling sensation in the extremities.
- **Options A, C, and D:** These are common symptoms of all types of anemia.

**6. The most common neonatal sepsis and meningitis infections seen within 24 hours after birth are caused by which organism?**

- A. *Candida albicans*
- B. *Chlamydia trachomatis*
- C. *Escherichia coli*
- D. Group B beta-hemolytic streptococci

**Correct Answer: D. Group B beta-hemolytic streptococci.**

- **Option D:** Transmission of Group B beta-hemolytic streptococci to the fetus results in respiratory distress that can rapidly lead to septic shock.

**7. Which of the following methods of insulin administration would be used in the initial treatment of hyperglycemia in a client with diabetic ketoacidosis?**

- A. Subcutaneous
- B. Intramuscular
- C. IV bolus only
- D. IV bolus, followed by continuous infusion

**Correct Answer: D. IV bolus, followed by continuous infusion.**

An IV bolus of insulin is given initially to control the hyperglycemia; followed by a continuous infusion, titrated to control blood glucose. Previous treatment protocols have recommended the administration of an initial bolus of 0.1 U/kg, followed by the infusion of 0.1 U/kg/h. A more recent prospective randomized trial demonstrated that a bolus is not necessary if patients are given hourly insulin infusion at 0.14 U/kg/hr.

- **Option A:** After the client is stabilized, subcutaneous insulin is given. Treatment of adult patients who have uncomplicated, mild diabetic ketoacidosis can be treated with subcutaneous insulin lispro hourly in a non-intensive care setting may be safe and cost-effective as opposed to treatment with intravenous regular insulin in the intensive care setting as shown in many studies.
- **Option B:** Insulin is never given intramuscularly. In one of these studies, the patients received subcutaneous insulin lispro at a dose of 0.3 U/kg initially, followed by 0.1 U/kg every hour until blood glucose was less than 250 mg/dl. Then insulin dose was decreased to 0.05 or 0.1 U/kg given every hour until the resolution of DKA.
- **Option C:** Intravenous insulin by continuous infusion is the standard of care. When the plasma glucose reaches 200-250 mg/dl, and if the patient still has an anion gap, then dextrose-containing fluids should be initiated, and the insulin infusion rate may need to be reduced.

### **8. The most common early sign of kidney disease is:**

- A. Sodium retention
- B. Elevated BUN level
- C. Development of metabolic acidosis
- D. Inability to dilute or concentrate urine

**Correct Answer: B. Elevated BUN level**

Increased BUN is usually an early indicator of decreased renal function. Although, immediately after a renal insult, blood urea nitrogen (BUN) or creatinine levels may be within the normal range. The only sign of the acute kidney injury may be a decline in urine output. AKI can lead to the accumulation of water, sodium, and other metabolic products. It can also result in several electrolyte disturbances.

- **Option A:** Evaluation of AKI should include a thorough search for all possible etiologies of AKI, including prerenal, renal, and post renal disease. The timing of the onset of AKI can be especially helpful when dealing with hospitalized patients. For example, if a patient's labs are being checked every day and creatinine suddenly starts to rise on the fourth day of admission then an inciting factor can usually be found in 24-48 hours preceding the onset.
- **Option C:** The impetus for glomerular filtration is the difference in the pressures between the glomerulus and the Bowman space. This pressure gradient is affected by the renal blood flow and is under the direct control of the combined resistances of afferent and efferent vascular pathways. Nevertheless, whatever the cause of AKI, renal blood flow reduction is a common pathologic pathway for declining glomerular filtration rate.

- **Option D:** The prerenal form of AKI is because of any cause of reduced blood flow to the kidney. This may be part of systemic hypoperfusion resulting from hypovolemia or hypotension, or maybe due to selective hypoperfusion to the kidneys, such as those resulting from renal artery stenosis and aortic dissection.

**9. Immobility impairs bladder elimination, resulting in such disorders as:**

- A. Increased urine acidity and relaxation of the perineal muscles, causing incontinence
- B. Urine retention, bladder distention, and infection
- C. Diuresis, natriuresis, and decreased urine specific gravity
- D. Decreased calcium and phosphate levels in the urine

**Correct Answer: B. Urine retention, bladder distention, and infection**

The immobilized patient commonly suffers from urine retention caused by decreased muscle tone in the perineum. This leads to bladder distention and urine stagnation, which provide an excellent medium for bacterial growth leading to infection.

- **Option A:** Urea is the main nitrogenous waste product resulting from protein breakdown (catabolism) and is rapidly eliminated in the urine by the kidneys. During bed rest, the concentration of urea in the blood increases, and the kidneys eliminate larger amounts of urea.
- **Option C:** As food intake usually decreases during bed rest, it is speculated that these higher concentrations of urea in blood and urine can only come from the catabolic breakdown of endogenous protein sources, such as muscle and other lean tissues (Bilancio et al, 2014). This correlates with the reduction in lean tissue mass and sarcopenia that are characteristic of prolonged immobility.
- **Option D:** Immobility is independently associated with the development of a series of complications, including pressure ulcer, deep vein thrombosis (DVT), pneumonia, and urinary tract infection (UTI) Immobility also results in more alkaline urine with excessive amounts of calcium, sodium, and phosphate, a gradual decrease in urine production, and increased specific gravity.

**10. Which of the following constitutes a break in sterile technique while preparing a sterile field for a dressing change?**

- A. Using sterile forceps, rather than sterile gloves, to handle a sterile item.
- B. Touching the outside wrapper of sterilized material without sterile gloves.
- C. Placing a sterile object on the edge of the sterile field.
- D. Pouring out a small amount of solution (15 to 30 ml) before pouring the solution into a sterile container.

**Correct Answer: C. Placing a sterile object on the edge of the sterile field.**

The edges of a sterile field are considered contaminated. When sterile items are allowed to come in contact with the edges of the field, the sterile items also become contaminated. The sterile field should be prepared as close as possible to the time of use.<sup>2</sup> The sterility of supplies used during a surgical procedure can be affected by the events taking place within the operating room, and the length of time the items have been exposed to the environment.

- **Option A:** Under no circumstances should sterile and nonsterile items/areas be mixed since one contaminates the other.<sup>4</sup> Sterilization provides the highest level of assurance that all instruments, sutures, fluids, supplies, and drapes are void of microorganisms.<sup>2</sup> The sterility of a package is determined by events, not by time. To ensure sterility, all sterile items need to be inspected for package integrity and sterilization process indicators, such as indicator tape and internal chemical indicators, prior to introduction onto the sterile field. If a package has been compromised, it should be considered contaminated and not be used.
- **Option B:** When opening wrapped supplies, the nonsterile person should open the top wrapper flap away from them first, then open the flaps to each side. The last wrapper flap is pulled toward the nonsterile person opening the package. This technique of opening a wrapped package ensures that the nonsterile person does not reach over the sterile item inside. All wrapper edges should be secured to prevent flipping the wrapper and contaminating the contents of the sterile package or field.
- **Option D:** Only the top rim of the bottle top and bottle contents are considered sterile once the cap has been removed from the bottle. Therefore, when sterile fluids are dispensed, the entire contents of the bottle must be poured or the fluid remaining in the bottle discarded. When solutions are poured onto the sterile field, they should be poured slowly to prevent contamination and fluid strikethrough from splashing.

**11. A client with diabetes mellitus type I was prescribed with exenatide (Bydureon). The nurse will take which of the following appropriate actions?**

- A. Withdraw the insulin from the prefilled pen into an insulin syringe
- B. Monitor for signs of nausea, vomiting, and gastric upset
- C. Administer the medication twice a day during pre-meals
- D. Hold the medication and call the physician to question the prescription

**Correct Answer: D. Hold the medication and call the physician to question the prescription**

Exenatide (Bydureon) is only used to treat diabetes mellitus type 2 only. Therefore, holding the medication and calling the physician to question the order.

- **Option A:** Prefilled pens are ready for injection.
- **Options B & C:** Although these are correct about the medication, it should not be administered in this kind of situation.

**12. The most important factor in providing nursing care to clients in a specific ethnic group is:**

- A. Communication
- B. Time orientation
- C. Biological variation
- D. Environmental control

**Correct Answer: A. Communication**

The ability to communicate effectively with patients and families is paramount for good patient care. This practice point reviews the importance of communicating effectively in cross-cultural encounters.

The LEARN (Listen, Explain, Acknowledge, Recommend, Negotiate) model is a framework for cross-cultural communication that helps build mutual understanding and enhance patient care.

- **Option B:** One way of looking at cultural attitudes to time is in terms of time orientation, a cultural or national preference toward past, present, or future thinking. The time orientation of a culture affects how it values time, and the extent to which it believes it can control time.
- **Option C:** Biological variations in transcultural nursing relate to the genetic difference between cultures that may or may not predispose certain groups to specific diseases. This dimension may also include variations of “pain tolerance and deficiencies and predilections in nutrition” (Albougami, Pounds, & Alotaibi, 2016).
- **Option D:** Environmental control refers to how the patient “perceives society and its internal and external factors, such as beliefs and understandings regarding how illness occurs, how it should be treated, and how health is uplifted and maintained” (Albougami, Pounds, & Alotaibi, 2016).

**13. To determine if a patient’s respiratory system is functioning, the nurse would assess which of the following parameters:**

- A. Respiratory rate
- B. Pulse
- C. Arterial blood gas
- D. Pulse oximetry

**Correct Answer: C. Arterial blood gas**

Arterial blood gases will indicate CO<sub>2</sub> and O<sub>2</sub> levels. This is an indication that the respiratory system is functioning. Blood gas analysis is a commonly used diagnostic tool to evaluate the partial pressures of gas in blood and acid-base content. Understanding and use of blood gas analysis enable providers to interpret respiratory, circulatory, and metabolic disorders.

- **Option A:** Respiratory rate can reveal data about other systems, such as the brain, making letter c a better choice. The respiratory rate is the number of breaths per minute. The normal breathing rate is about 12 to 20 breaths per minute in an average adult. In the pediatric age group, it is defined by the particular age group. Parameters important here again include its rate, depth of breathing, and its pattern rate of breathing is a crucial parameter.
- **Option B:** Pulse rate is not a measure of respiratory status. Parameters for assessment of pulse include its rate, rhythm, volume, amplitude, and rate of increase, besides its symmetry. The rate of the pulse is significant to measure for assessing the physiological and pathological processes affecting the body. The normal range used in an adult is between 60 to 100 beats /minute with rates above 100 beats/minute and rates and below 60 beats per minute.
- **Option D:** Pulse oximetry yields oxygen saturation levels, which is not a measure of acid-base balance. Pulse oximetry is a non-invasive monitor that measures the oxygen saturation in the blood by shining light at specific wavelengths through tissue (most commonly the fingernail bed).

**14. Which client is most likely to receive opioids for extended periods of time?**

- A. A client with fibromyalgia
- B. A client with phantom limb pain

- C. A client with progressive pancreatic cancer
- D. A client with trigeminal neuralgia

**Correct Answer: C. A client with progressive pancreatic cancer**

Cancer pain generally worsens with disease progression and the use of opioids is more generous. Opioids (narcotics) are used with or without non-opioids to treat moderate to severe pain. They are often a necessary part of a pain relief plan for cancer patients. These medicines are much like natural substances (called endorphins) made by the body to control pain. They were once made from the opium poppy, but today many are man-made in a lab.

- **Option A:** Fibromyalgia is more likely to be treated with non-opioid and adjuvant medications. It is recommended to continue nonpharmacologic measures along with the use of medications for most patients with fibromyalgia. Some patients may, however, respond adequately to nonpharmacologic measures alone. The medications that have been well studied and consistently effective are certain antidepressants and anticonvulsants.
- **Option B:** Phantom limb pain usually subsides after amputation begins. Treatment, unfortunately, for PLP has not proven to be very effective. While treatment for RLP tends to focus on an organic cause for the pain, PLP focuses on symptomatic control.
- **Option D:** Trigeminal neuralgia is treated with anti-seizure medications such as carbamazepine (Tegretol). The first-line treatment for patients with classic TN and idiopathic TN is pharmacologic therapy. The most commonly used medication is the anticonvulsant drug, carbamazepine. It is usually started at a low dose, and the dose is gradually increased until it controls the pain. It controls pain for most people in the early stages of the disease.

**15. A patient infected with human immunodeficiency virus (HIV) begins zidovudine therapy. Which of the following statements best describes this drug's action?**

- A. It stimulates the immune system.
- B. It destroys the outer wall of the virus and kills it.
- C. It interferes with viral replication
- D. It promotes excretion of viral antibodies.

**Correct Answer: C. It interferes with viral replication.**

Zidovudine inhibits DNA synthesis in HIV, thus interfering with viral replication. The drug doesn't destroy the viral wall, stimulate the immune system, or promote HIV antibody excretion.

- **Options A, B, D:** These options are not functions of Zidovudine.

**16. A client who has been receiving heparin therapy also is started on warfarin sodium (coumadin). The client asks the nurse why both medications are being administered. In formulating a response, the nurse incorporates the understanding that warfarin sodium:**

- A. Stimulates the breakdown of specific clotting factors by the liver, and it takes 2-3 days for this to exhibit an anticoagulant effect.



- B. Inhibits synthesis of specific clotting factors in the liver, and it takes 3 to 4 days for this medication to exert an anticoagulation effect.
- C. Stimulates production of the body's own thrombolytic substances, but it takes 2-4 days for it to begin.
- D. Has the same mechanism action of heparin, and the crossover time is needed for the serum level of warfarin sodium to be therapeutic.

**Correct Answer: B. Inhibits synthesis of specific clotting factors in the liver, and it takes 3 to 4 days for this medication to exert an anticoagulation effect.**

Warfarin sodium works in the liver and inhibits synthesis of four vitamin K-dependent clotting factors (X, IX, VII, and II), but it takes 3 to 4 days before the therapeutic effect of warfarin is exhibited. Heparin is generally continued for seven to ten days. During this time warfarin is generally begun, and it is important to continue the patient on warfarin for five to seven days while the patient is receiving intravenous heparin therapy. After stopping heparin, oral anticoagulation with warfarin should be continued for six weeks.

- **Option A:** Because of the delay in factor II (prothrombin) suppression, heparin is administered concurrently for four to five days to prevent thrombus propagation. Loading doses of warfarin are not warranted and may result in bleeding complications.
- **Option C:** Current recommendations for the initiation of warfarin therapy differ based on the urgency for achieving an anticoagulant effect. While warfarin is being initiated, patients who require rapid anticoagulation should also be given unfractionated heparin or low-molecular-weight heparin intravenously or subcutaneously in doses appropriate for the given indication.
- **Option D:** Heparin and warfarin therapies should overlap for approximately four to five days. The presence of a therapeutic INR does not confer protection from clot formation and expansion during the first few days of warfarin therapy because of the delay in the therapeutic inhibition of prothrombin.

**17. Nurse Pietro receives an 11-month old child with a fracture of the left femur on the pediatric unit. Which action is important for the nurse to take first?**

- A. Call for a social worker to meet with the family.
- B. Check the child's blood pressure, pulse, respiration, and temperature.
- C. Administer pain medications
- D. Speak with the parents about how the fracture occurred.

**Correct Answer: D. Speak with the parents about how the fracture occurred.**

In case of injury, especially among children, it is very important that the nurse should first assess possible abuse. Abuse is one of the reporting responsibilities of the nurse. The first step in any child protection response system is the identification of possible incidents of child maltreatment. Medical personnel, educators, childcare providers, mental health professionals, law enforcement personnel, the clergy, and other professionals are often in a position to observe and/or screen families and children to identify abuse or neglect when it occurs.

- **Option A:** An initial assessment or investigation is conducted on reports that are screened in during the intake process to identify whether the maltreatment can be substantiated. In addition to child protective services and law enforcement, other professionals such as medical and mental health personnel, teachers and childcare providers, and foster care or residential staff may play a role in the initial assessment.

- **Option B:** After initial screening for child abuse, the nurse may take the patient's vital signs. State laws provide guidance to child protective services (CPS) agencies regarding identifying and reporting suspected child maltreatment, investigating to determine whether abuse occurred, and providing necessary services for children and youth and their families.
- **Option C:** Administering pain medications can be done after assessing the patient's vital signs. Ibuprofen worked at least as well as acetaminophen with codeine for fracture pain control, and had fewer adverse effects. Children given ibuprofen were better able to eat and play than those given acetaminophen with codeine—an important patient-oriented functional outcome.

**18. During the assessment of a laboring client, the nurse notes that the FHT are loudest in the upper-right quadrant. The infant is most likely in which position?**

- A. Right breech presentation
- B. Right occiput anterior presentation
- C. Left sacral anterior presentation
- D. Left occiput transverse presentation

**Correct Answer: A. Right breech presentation**

If the fetal heart tones are heard in the right upper abdomen, the infant is in a breech presentation. A breech position is not ideal for delivery. Though the majority of breech babies are born healthy, they may have a higher risk of birth defects or trauma during delivery. This position can also be problematic because it increases the risk of forming a loop in the umbilical cord that could cause injury to the baby if they're delivered vaginally.

- **Option B:** If the infant is positioned in the right occiput anterior presentation, the FHTs will be located in the right lower quadrant, so answer B is incorrect. The baby is head down, with their face facing the mother's back. The baby's chin is tucked into their chest and their head is ready to enter the pelvis. The baby is able to flex their head and neck, and tuck their chin into their chest. This is usually referred to as occipito-anterior, or the cephalic presentation.
- **Option C:** If the fetus is in the sacral position, the FHTs will be located in the center of the abdomen, so answer C is incorrect. Left Sacrum Anterior (LSA) means the fetal sacrum is closest to the mother's symphysis and rotated slightly to the mother's left (clockwise from direct SA).
- **Option D:** If the FHTs are heard in the left lower abdomen, the infant is most likely in the left occiput transverse position, making answer D incorrect. This LOT (Left, Occiput, Transverse) position and its' mirror image, ROT, are common in early labor. As labor progresses and the fetal head descends, the occiput usually rotates anteriorly, converting this LOT to an LOA or OA as the head delivers.

**19. During the acute phase, the nurse applied gentamicin sulfate (topical antibiotic) to the burn before dressing the wound. The client has all the following manifestations. Which manifestation indicates that the client is having an adverse reaction to this topical agent?**

- A. Increased wound pain 30 to 40 minutes after drug application
- B. Presence of small, pale pink bumps in the wound beds
- C. Decreased white blood cell count

D. Increased serum creatinine level

**Correct Answer: D. Increased serum creatinine level**

Gentamicin is nephrotoxic and sufficient amounts can be absorbed through burn wounds to affect kidney function. Any client receiving gentamicin by any route should have kidney function monitored. Characteristically, gentamicin reaches high concentrations in the renal cortex and the inner ear.

- **Option A:** Gentamicin does not stimulate pain in the wound. The gentamicin is prone to accumulate in the renal proximal tubular cells and can cause damage. Hence, mild proteinuria and reduction of the glomerular filtration rate are potential consequences of gentamicin use, achieving 14% of gentamicin users in a review.
- **Option B:** The small, pale pink bumps in the wound bed are areas of re-epithelialization and not an adverse reaction. Renal function should be evaluated twice-weekly in patients without previous renal disease through serum creatinine and blood urea nitrogen. Periodic microscopic urinalysis is also vital to detect proteinuria and casts, which may indicate kidney injury.
- **Option C:** The possible hypersensitivity manifestations of gentamicin are urticaria, eosinophilia, delayed-type hypersensitivity reaction (Stevens-Johnson syndrome and toxic epidermal necrolysis), angioedema, and anaphylactic shock. The clinical manifestations should guide the treatment strategy.

**20. A teen patient is admitted to the hospital by his physician who suspects a diagnosis of acute glomerulonephritis. Which of the following findings is consistent with this diagnosis? Select all that apply.**

- A. Urine specific gravity of 1.040.
- B. Urine output of 350 ml in 24 hours.
- C. Brown ("tea-colored") urine.
- D. Generalized edema.
- E. Periorbital swelling.

**Correct Answer: A, B, C & E**

Acute glomerulonephritis is characterized by high urine specific gravity related to oliguria as well as dark "tea-colored" urine caused by large amounts of red blood cells. As the glomerular filtration rate (GFR) is decreased, symptoms like edema and hypertension occur, majorly due to the subsequent salt and water retention caused by the activation of the renin-angiotensin-aldosterone system.

- **Option A:** Glomerulonephritis and pyelonephritis cause a decreased urine volume and low specific gravity. In these diseases, damage to the kidney's tubules affects the ability of the kidney to reabsorb water. As a result, the urine remains dilute.
- **Option B:** About half of the people with acute glomerulonephritis have no symptoms. If symptoms do occur, the first to appear are tissue swelling (edema) due to fluid retention, low urine volume, and production of urine that is dark because it contains blood.
- **Option C:** When kidneys are failing, the increased concentration and accumulation of substances in urine lead to a darker color which may be brown, red or purple. The color change is due to abnormal protein or sugar, high levels of red and white blood cells, and high numbers of tube-shaped particles called cellular casts.

- **Option D:** There is periorbital edema, but generalized edema is seen in nephrotic syndrome, not acute glomerulonephritis. Edema may first appear as puffiness of the face and eyelids but later is prominent in the legs. This is reported in approximately 85% of pediatric patients; edema may be mild (involving only the face) to severe, bordering on a nephrotic appearance.
- **Option E:** Patients often have a normal physical examination and blood pressure; most frequently, however, patients present with a combination of edema, hypertension, and oliguria. The physician should look for signs of fluid overload, like periorbital and/or pedal edema.

**21. A physician diagnoses a client with myasthenia gravis, prescribing pyridostigmine (Mestinon), 60 mg P.O. every 3 hours. Before administering this anticholinesterase agent, the nurse reviews the client's history. Which preexisting condition would contraindicate the use of pyridostigmine?**

- A. Ulcerative colitis
- B. Blood dyscrasia
- C. Intestinal obstruction
- D. Spinal cord injury

**Correct Answer: C. Intestinal obstruction**

Anticholinesterase agents such as pyridostigmine are contraindicated in a client with a mechanical obstruction of the intestines or urinary tract, peritonitis, or hypersensitivity to anticholinesterase agents. Pyridostigmine bromide is preferred over neostigmine because of its longer duration of action. In those with bromide intolerance that leads to gastrointestinal effects, ambenonium chloride can be used. Patients with MuSK MG respond poorly to these drugs and hence may require higher doses.

- **Option A:** Ulcerative colitis is not a contraindication to pyridostigmine. The mainstay of treatment in MG involves cholinesterase enzyme inhibitors and immunosuppressive agents. Symptoms that are resistant to primary treatment modalities or those requiring rapid resolution of symptoms (myasthenic crisis), plasmapheresis, or intravenous immunoglobulins can be used.
- **Option B:** Blood dyscrasia is not a contraindication to pyridostigmine. Agricultural employees who handle organophosphates for a prolonged period should have medical monitoring. Appropriate testing is recommended to identify overexposure before the occurrence of clinical illness. Both serum and RBC cholinesterase must be determined.
- **Option D:** The contraction of the smooth muscle in various organs of the body gets mediated through M3 receptors. Tone and peristalsis in the gastrointestinal tract increase and sphincters relax, causing abdominal cramps and evacuation of the bowel. The detrusor muscle contracts while the bladder trigone and sphincter relax, leading to the voiding of the bladder.

**22. Surgical management of ulcerative colitis may be performed to treat which of the following complications?**

- A. Gastritis
- B. Bowel herniation
- C. Bowel outpouching
- D. Bowel perforation

**Correct Answer: D. Bowel perforation**

Perforation, obstruction, hemorrhage, and toxic megacolon are common complications of ulcerative colitis that may require surgery. Perforation can also present in severe ulcerative colitis even in the absence of toxic megacolon. Most perforations occur in the left colon, commonly in the sigmoid colon. Perforations tend to occur more often during the first episodes of colitis.

- **Option A:** Gastritis isn't associated with irritable bowel diseases. The current classification of gastritis is based on time course (acute versus chronic), histological features, anatomic distribution, and underlying pathological mechanisms. Acute gastritis will evolve to chronic, if not treated. *Helicobacter pylori* (*H. pylori*) is the most common cause of gastritis worldwide.
- **Option B:** Inguinal hernias are considered to have both a congenital and acquired component. Most adult hernias are considered acquired. However, there is evidence to suggest genetics also play a role. Patients with a known family history of a hernia are at least 4 times more likely to have an inguinal hernia than patients with no known family history.
- **Option C:** Outpouching of the bowel is diverticulosis. Diverticulosis is a clinical condition in which multiple sac-like protrusions (diverticula) develop along the gastrointestinal tract. Though diverticula may form at weak points in the walls of either the small or large intestines, the majority occur in the large intestine (most commonly the sigmoid colon).

**23. The nurse formulates a nursing diagnosis of Impaired verbal communication for a client with schizotypal personality disorder. Based on this nursing diagnosis, which nursing intervention is most appropriate?**

- A. Helping the client to participate in social interactions.
- B. Establishing a one-on-one relationship with the client.
- C. Establishing alternative forms of communication.
- D. Allowing the client to decide when he wants to participate in verbal communication with the nurse.

**Correct Answer: B. Establishing a one-on-one relationship with the client**

By establishing a one-on-one relationship, the nurse helps the client learn how to interact with people in new situations. Assess if incoherence in speech is chronic or if it is more sudden, as in an exacerbation of symptoms. Establishing a baseline facilitates the establishment of realistic goals, the foundation for planning effective care.

- **Option A:** Plan short, frequent periods with a client throughout the day. Short periods are less stressful, and periodic meetings give a client a chance to develop familiarity and safety. Keep voice in a low manner and speak slowly as much as possible. A high-pitched/loud tone of voice can elevate anxiety levels while slow speaking aids understanding.
- **Option C:** Keep the environment calm, quiet and as free of stimuli as possible. Keep anxiety from escalating and increasing confusion and hallucinations/delusions. Use clear or simple words, and keep directions simple as well. The client might have difficulty processing even simple sentences. Use simple, concrete, and literal explanations. Minimizes misunderstanding and/or incorporating those misunderstandings into delusional systems.
- **Option D:** The other options are appropriate but should take place only after the nurse-client relationship is established. Use therapeutic techniques (clarifying feelings when speech and thoughts are disorganized) to try to understand the client's concerns. Even if the words are hard to understand, try getting to the feelings behind them. When you do not understand a client, let him/her know you are having difficulty understanding. Pretending to understand limits your

credibility in the eyes of your client and lessens the potential for trust.

**24. A nurse is handling a child who is on furosemide (Lasix) IV infusion. The nurse instructs the mother to encourage the child to eat which of the following?**

- A. Apricot and baked potato skin.
- B. Bread and butter.
- C. Gelatin and Cauliflower.
- D. Ginger ale and cereal.

**Correct Answer: A. Apricot and baked potato skin.**

One of the side effects of taking furosemide is hypokalemia, so a supplemental food rich in potassium is encouraged. Many fresh fruits and vegetables are rich in potassium: Bananas, oranges, cantaloupe, honeydew, apricots, grapefruit (some dried fruits, such as prunes, raisins, and dates, are also high in potassium).

- **Option B:** Bread is rich in carbohydrates and butter is sufficient in fats. Foods that have the highest concentrations of potassium include cantaloupe, watermelons, grapefruit, all dried fruit and fruit juices, avocados, tomatoes, potatoes (plain and sweet), Brussels sprouts, milk, yogurt, lentils, and most nuts (except peanuts).
- **Option C:** Cauliflower is a cruciferous vegetable that is naturally high in fiber and B-vitamins. It provides antioxidants and phytonutrients that can protect against cancer. It also contains fiber to enhance weight loss and digestion, choline that is essential for learning and memory, and many other important nutrients.
- **Option D:** These are low in potassium. People may think of ginger ale as another form of soda, but in fact, this beverage does have some important nutrients, including calcium, iron, copper, and magnesium, among others. It is relatively low in calories, but most manufacturers add sugar to make the drink more palatable.

**25. Henry is a Unit Manager I the Medical Unit. He is not satisfied with the way things are going in his unit. The patient satisfaction rate is 60% for two consecutive months and staff morale is at its lowest. He decides to plan and initiate changes that will push for a turnaround in the condition of the unit. Which of the following actions is a priority for Henry?**

- A. Call for a staff meeting and take this up in the agenda.
- B. Seek help from her manager.
- C. Develop a strategic action on how to deal with these concerns.
- D. Ignore the issues since these will be resolved naturally.

**Correct Answer: A. Call for a staff meeting and take this up on the agenda.**

This will allow for the participation of every staff in the unit. If they contribute to the solutions of the problem, they will own the solutions; hence the chance for compliance would be greater. It's one thing to articulate the change required and entirely another to conduct a critical review against organizational objectives and performance goals to ensure the change will carry the unit in the right direction strategically, financially, and ethically.

- **Option B:** Determine the most effective means of communication for the group or individual that will bring them on board. The communication strategy should include a timeline for how the change will be incrementally communicated, key messages, and the communication channels and mediums that is planned to use.
- **Option C:** Providing a support structure is essential to assist employees to emotionally and practically adjust to the change and to build the proficiency of behaviors and technical skills needed to achieve desired results.
- **Option D:** Review the effect on the unit and how it cascades through the organizational structure to the individual. This information will start to form the blueprint for where training and support are needed the most to mitigate the impacts.

**26. A female client with dysphagia is being prepared for discharge. Which outcome indicates that the client is ready for discharge?**

- A. The client doesn't exhibit rectal tenesmus.
- B. The client is free from esophagitis and achalasia.
- C. The client reports diminished duodenal inflammation.
- D. The client has normal gastric structures.

**Correct Answer: B. The client is free from esophagitis and achalasia.**

Dysphagia may be the reason why a client with esophagitis or achalasia seeks treatment. Dysphagia is common in patients with erosive esophagitis but is not a reliable clinical predictor of severe erosive esophagitis. Dysphagia resolved with PPI therapy in most cases, but persistent dysphagia may indicate failed healing. Dysphagia isn't associated with rectal tenesmus, duodenal inflammation, or abnormal gastric structures.

- **Option A:** Rectal tenesmus can happen for several reasons. The most common is colon inflammation, either from a noninfectious or infectious cause. Inflammatory bowel disease (IBD) is one cause of colon inflammation. IBD is an umbrella term for several long-term conditions involving chronic inflammation of the gut.
- **Option C:** The most common cause of duodenitis is infection by *Helicobacter pylori* (*H. pylori*) bacteria. Another common cause is the long-term use of NSAIDs (such as aspirin and ibuprofen). Celiac disease, an allergy to gluten, causes a particular type of inflammation in the duodenum along with other changes.
- **Option D:** Dysphagia means difficulty swallowing. For this diagnosis, it is critical that related symptoms be associated with the act of swallowing a liquid or solid bolus. When unassociated with swallowing, the sensation of fullness in the upper esophagus suggests globus hystericus, which is distinct from dysphagia.

**27. When a female client with an indwelling urinary (Foley) catheter insists on walking to the hospital lobby to visit with family members, nurse Rose teaches how to do this without compromising the catheter. Which client action indicates an accurate understanding of this information?**

- A. The client sets the drainage bag on the floor while sitting down.
- B. The client keeps the drainage bag below the bladder at all times.

- C. The client clamps the catheter drainage tubing while visiting with the family.
- D. The client loops the drainage tubing below its point of entry into the drainage bag.

**Correct Answer: B. The client keeps the drainage bag below the bladder at all times.**

To maintain effective drainage, the client should keep the drainage bag below the bladder; this allows the urine to flow by gravity from the bladder to the drainage bag. Make sure that the patient maintains a generous fluid intake. This helps prevent infection and irrigates the catheter naturally by increasing urinary output.

- **Option A:** The client shouldn't lay the drainage bag on the floor because it could become grossly contaminated. Teach the patient the importance of personal hygiene, especially the importance of careful cleaning after having bowel movements and thorough washing of hands frequently.
- **Option C:** The client shouldn't clamp the catheter drainage tubing because this impedes the flow of urine. Plan to change indwelling catheters only as necessary. The usual length of time between catheter changes varies and can be anywhere from 5 days to 2 weeks. The less often a catheter is changed, the less the likelihood that an infection will develop.
- **Option D:** To promote drainage, the client may loop the drainage tubing above — not below — its point of entry into the drainage bag. Report any signs of infection promptly. These include a burning sensation and irritation at the meatus, cloudy urine, a strong odor to the urine, an elevated temperature, and chills.

**28. Which question is helpful in determining the study's credibility?**

- A. Do the participants recognize the experience as their own?
- B. What strategies were used to analyze the data?
- C. How were human subjects protected?
- D. Are the findings applicable outside the study situation?

**Correct Answer: A. Do the participants recognize the experience as their own?**

Credibility is the truth of findings as judged by the participants. To help establish, the researcher should return to the original participants and get them to validate the findings. Others within the discipline may also help establish by review of the data and findings.

- **Option B:** Auditability assists the reader to judge the appropriateness of the interview questions posed. Auditability is established by the reader being able to follow the steps of the research from the research questions, to the data collection, to the data, and then to the findings (categories, themes, model).
- **Option C:** Fittingness is the meaningfulness of the everyday findings to everyday reality of that situation. Are the results described in enough detail so that one may evaluate them for their own practice?
- **Option D:** This question will critique the auditability of a research project. Understand the purpose and problem, while determining if the design and methodology are consistent with the purpose.

**29. A nurse is assessing a client with an abdominal aortic aneurysm. Which of the following assessment findings by the nurse is probably unrelated to an aneurysm?**



- A. Pulsatile abdominal mass.
- B. Hyperactive bowel sounds in that area.
- C. Systolic bruit over the area of the mass.
- D. Subjective sensation of "heart beating" in the abdomen.

**Correct Answer: B. Hyperactive bowel sounds in that area**

Not all clients with abdominal aortic aneurysms exhibit symptoms. Physical exam should also look for other associated aneurysms. The most common associated aneurysm is an iliac artery aneurysm. Peripheral aneurysms are also associated in approximately 5 % of patients, of which popliteal artery aneurysms are the most common.

- **Option A:** A pulsatile mass may be palpated in the middle and upper abdomen. Palpation of the abdomen usually reveals a non-tender, pulsatile abdominal mass. Enlarging aneurysms can cause symptoms of abdominal, flank, or back pain. Compression of adjacent viscera can cause gastrointestinal (GI) or renal manifestations.
- **Option C:** A systolic bruit may be auscultated over the mass. Hyperactive bowel sounds are not related specifically to an abdominal aortic aneurysm. Rupture of an abdominal aortic aneurysm is life-threatening. These patients may present in shock often with diffuse abdominal pain and distension. However, the presentation of patients with this type of ruptured aneurysm can vary from subtle to quite dramatic. Most patients with a ruptured abdominal aortic aneurysm die before hospital arrival.
- **Option D:** Those who do describe a feeling of the "heart beating" in the abdomen when supine or be able to feel the mass throbbing. On physical exam, the patient may have tenderness over the aneurysm or demonstrate signs of embolization. The aneurysm may rupture into adjacent viscera or vessels presenting with GI bleeding or congestive heart failure due to the aortocaval fistula.

**30. A nurse is suctioning fluids from a male client via a tracheostomy tube. When suctioning, the nurse must limit the suctioning time to a maximum of:**

- A. 1 minute
- B. 5 seconds
- C. 10 seconds
- D. 30 seconds

**Correct Answer: C. 10 seconds**

Hypoxemia can be caused by prolonged suctioning, which stimulates the pacemaker cells in the heart. A vasovagal response may occur, causing bradycardia. The nurse must preoxygenate the client before suctioning and limit the suctioning pass to 10 seconds. It is of particular importance for patients with mechanical ventilators, endotracheal tube (ET) intubations, tracheostomies, or other airway adjuncts. Clearance of airway secretions is a normal process and is critical to the prevention of respiratory infections, atelectasis, and preservation of airway patency.

- **Option A:** Preoxygenation with 100% oxygen should be initiated prior to suctioning. This is in preparation for the hypoxia that is precipitated by suctioning, both from mechanical interruption and cessation of oxygen flow briefly. Suctioning can stimulate the vagus nerve, predisposing the patient to bradycardia and hypoxia.

- **Option B:** The catheter should be introduced to the desired depth, and then suctioning should be started. Brief, 10-second suction duration is usually recommended to avoid mucosal damage and prolonged hypoxia. Hypoxia can be profound from occlusion, interruption of oxygen supply, and prolonged suctioning.
- **Option D:** The adequacy of suctioning can be assessed by the clearance of secretions, improved breath sounds, improved air entry, good pulse oximetry readings, and improvement in respiratory distress in a patient. Complications from airway

**31. Alice is rushed to the emergency department during an acute, severe prolonged asthma attack and is unresponsive to usual treatment. The condition is referred to as which of the following?**

- A. Status asthmaticus
- B. Reactive airway disease
- C. Intrinsic asthma
- D. Extrinsic asthma

**Correct Answer: A. Status asthmaticus**

Status asthmaticus is an acute, prolonged, severe asthma attack that is unresponsive to usual treatment. Typically, the child requires hospitalization. One of the most common causes of emergency room visits in the United States is status asthmaticus, an acute, emergent episode of bronchial asthma that is poorly responsive to standard therapeutic measures.

- **Option B:** Reactive airway disease is another general term for asthma. In children, the diagnosis of RAD (reactive airway disease) or recurrent WARIs (wheezing-associated respiratory infections) often precede a formal diagnosis of asthma.
- **Option C:** Intrinsic is a term used to denote internal precipitating factors, such as viruses. In intrinsic asthma, IgE is usually only involved locally, within the airway passages. The airways become more and more narrow, resulting in an asthma attack. Unlike extrinsic asthma, which is triggered by commonly known allergens, intrinsic asthma may be triggered by a wide range of non-allergy-related factors.
- **Option D:** Extrinsic is a term used to denote external precipitating factors, such as allergens. Extrinsic asthma is more common than intrinsic asthma. In extrinsic asthma, symptoms are triggered by an allergen (such as dust mites, pet dander, pollen, or mold). The immune system overreacts, producing too much of a substance (called IgE) throughout the body. It's the IgE that triggers an extrinsic asthma attack.

**32. Barbara with bipolar disorder is being treated with lithium for the first time. Nurse Clint should observe the client for which common adverse effect of lithium?**

- A. Polyuria
- B. Seizures
- C. Constipation
- D. Sexual dysfunction

**Correct Answer: A. Polyuria**

Polyuria commonly occurs early in the treatment with lithium and could result in fluid volume deficit. Before starting treatment with lithium, it is essential to get kidney function tests and thyroid function tests. Lithium is not recommended in patients with renal impairment. It is also not recommended in patients with cardiovascular disease. Avoid all diuretics. If the patient has severe renal dysfunction or failure, or severely altered mental status, then start with hemodialysis.

- **Option B:** Rarely, toxicity can cause pseudotumor cerebri and seizures. Lithium toxicity has no antidote. Treatment for lithium toxicity is primarily hydration and to stop the drug. Give hydration with normal saline, which will also enhance lithium excretion. 20 to 30 mg of propranolol given 2 to 3 times per day may help reduce tremors.
- **Option C:** It is also important to monitor patients for dehydration and lower the dose when there are signs of infection, excessive sweating, or diarrhea. Toxic levels are when the drug level is more than 2 mEq/L. Monitoring should be done every 1 to 2 weeks until reaching the desired therapeutic levels. Then, check lithium levels every 2 to 3 months for six months.
- **Option D:** Lithium has a very narrow therapeutic index, and toxic levels are when the drug is above 2 mEq/L, which is very close to its therapeutic range. Lithium toxicity can cause interstitial nephritis, arrhythmia, sick sinus syndrome, hypotension, T wave abnormalities, and bradycardia.

**33. Emily is talking to her 6 year-old sister Julia. She asks why the sun shines so bright? Julia answered that “it always keeps her warm. What stage in the cognitive theory of development explains this?**

- A. Formal operational
- B. Concrete operational
- C. Sensorimotor
- D. Preoperational

**Correct Answer: D. Preoperational**

Children in this stage tend to be egocentric and have difficulty taking the viewpoint of others. At this stage, kids learn through pretend play but still struggle with logic and taking the point of view of other people. They also often struggle with understanding the idea of constancy.

- **Option A:** Children in this stage can think logically about abstract propositions and test hypotheses systematically. Teens begin to think more about moral, philosophical, ethical, social, and political issues that require theoretical and abstract reasoning.
- **Option B:** Children in this stage can think logically about objects and events. Their thinking becomes more logical and organized, but still very concrete. While children are still very concrete and literal in their thinking at this point in development, they become much more adept at using logic.
- **Option C:** Children in this stage obtain knowledge about the environment through the use of senses and reflexes. A child's entire experience at the earliest period of this stage occurs through basic reflexes, senses, and motor responses.

**34. The pituitary hormone that stimulates the secretion of milk from the mammary glands is:**

- A. Prolactin
- B. Oxytocin
- C. Estrogen
- D. Progesterone

**Correct Answer: A. Prolactin.**

Prolactin is the hormone from the anterior pituitary gland that stimulates mammary gland secretion. Oxytocin, a posterior pituitary hormone, stimulates the uterine musculature to contract and causes the "let down" reflex.

- **Option B:** Oxytocin has been best known for its roles in female reproduction. It is released in large amounts during labor, and after stimulation of the nipples. It is a facilitator for childbirth and breastfeeding. One of the oldest applications of oxytocin as a proper drug is as a therapeutic agent during labor and delivery. It is a stimulant widely employed to induce or augment labor, especially at term, when adequate oxytocin receptors are present. It is also one of the principal uterotonic drugs used to prevent postpartum hemorrhage.
- **Option C:** Estrogen is a steroid hormone associated with the female reproductive organs and is responsible for the development of female sexual characteristics. In the uterus, estrogen helps to proliferate endometrial cells in the follicular phase of the menstrual cycle, thickening the endometrial lining in preparation for pregnancy.
- **Option D:** Progesterone is an endogenous steroid hormone that is commonly produced by the adrenal cortex as well as the gonads, which consist of the ovaries and the testes. Progesterone is also secreted by the ovarian corpus luteum during the first ten weeks of pregnancy, followed by the placenta in the later phase of pregnancy. The conversion of progesterone generation from the corpus luteum to the placenta generally occurs after week ten.

**35. Each acetaminophen (Tylenol) #3 tablet has 325 mg of acetaminophen and 30 mg codeine. A patient is told to take 2 tablets PO every 4 hours for pain. The maximum safe dose of acetaminophen is 4 g/day. The safe dose of codeine varies with tolerance. Is the dose safe?**

- A. 3.25 grams per day. Safe!
  - B. 3.9 grams per day. Safe!
  - C. 8.25 grams per day. Not safe!
  - D. 8.9 grams per day. Not safe!
- B. 3.9 grams per day. Safe!
  - Multiply 325 mg/tablet by 2 tablets/dose to get 650 mg.
  - Then , multiply 650 mg by 6 doses/day to get 3,900.
  - Divide 3,900 by 1,000 mg to get 3.9 grams per day.

**36. Which information obtained by the nurse about a patient with colon cancer who is scheduled for external radiation therapy to the abdomen indicates a need for patient teaching?**

- A. The patient showers with unscented mild soap daily
- B. The patient eats frequently during the day
- C. The patient swims a mile 5 days a week
- D. The patient has a history of dental caries

**Correct Answer: C. The patient swims a mile 5 days a week**

- **Option C:** The patient is instructed to avoid swimming in salt water or chlorinated pools during the treatment period to prevent a skin reaction.
- **Options A and B:** The patient does not need to change the habits of eating frequently or showering with a mild soap.
- **Option D:** A history of dental caries will not impact the patient who is scheduled for abdominal radiation.

**37. A 36-year-old man with lymphoma presents with signs of impending septic shock 9 days after chemotherapy. The nurse would expect which of the following to be present?**

- A. Low-grade fever, chills, tachycardia
- B. Elevated temperature, oliguria, hypotension
- C. Flushing, decreased oxygen saturation, mild hypotension
- D. High-grade fever, normal blood pressure, increased respirations

**Correct Answer: A. Low-grade fever, chills, tachycardia**

- **Option A:** Nine days after chemotherapy, one would expect the client to be immunocompromised. The clinical signs of shock reflect changes in cardiac function, vascular resistance, cellular metabolism, and capillary permeability. Low-grade fever, tachycardia, and flushing may be early signs of shock.
- **Option B:** Oliguria and hypotension are late signs of shock. Urine output can be initially normal or increased.
- **Options C and D:** The client with impending signs of septic shock may not have decreased oxygen saturation levels and normal blood pressure.

**38. A nurse on the surgical floor is prioritizing care for clients after receiving the report from the previous shift. Which of the following patients should the nurse assess first?**

- A. A 35-year-old patient admitted three hours ago for a gunshot wound, with a 1.5 cm area of dark drainage noted on the dressing.
- B. A 43-year-old patient who underwent a mastectomy two days ago, with 23 ml of serosanguinous fluid in the Jackson-Pratt drain.
- C. A 59-year-old patient with a history of a collapsed lung from an accident, with no drainage noted in the chest tube in the past eight hours.

- E. A 54-year-old patient with a total knee replacement two days ago, with moderate swelling at the surgical site.
- E. A 47-year-old patient who had a laparoscopic cholecystectomy yesterday, complaining of mild pain at the incision site.
- F. A 62-year-old patient who had an abdominal-perineal resection three days ago, now reporting chills.

**Correct Answer: F. A 62-year-old patient who had an abdominal-perineal resection three days ago, now reporting chills.**

The client is at risk for peritonitis; should be assessed for further symptoms and infection.

**39. To validate the suspicion that a married male client has sleep apnea the nurse first:**

- A. Asks the client if he experiences apnea in the middle of the night.
- B. Questions the spouse if she is awakened by her husband's snoring.
- C. Place the client on a continuous positive airway pressure (CPAP) device.
- D. Schedules the client for a sleep test.

**Correct Answer: D. Schedules the client for a sleep test.**

Although this is a diagnostic tool, the first thing the nurse would do is question the spouse. This may lead to determining whether more tests are needed. Obstructive sleep apnea syndrome is a condition in which there is a dynamic collapse of upper airway tissues during sleep. This may result in recurrent respiratory-related events and both short-term symptomatic consequences and long-term physiologic consequences.

- **Option A:** Inquiring regarding sleep hygiene and screening for other sleep-related diagnoses is also important. One of the key points is to determine whether the patient is experiencing sleepiness associated with OSA, from fatigue, which indicates alternative medical diagnoses.
- **Option B:** A complete history for a patient presenting with signs or symptoms of OSA must be obtained, including symptoms of daytime sleepiness, associated sleep symptoms, snoring, coughing, or choking during sleep, morning headaches, chest pain, dyspnea, or neuropsychiatric changes.
- **Option C:** For adults, the use of continuous positive airway pressure (CPAP) is the most effective treatment, and diligent adherence to nightly CPAP use can result in near-complete resolution of symptoms. For patients unable or unwilling to use CPAP or those who will be unable to access electricity reliably, custom-fitted and titrated oral appliances can be used to bring the lower jaw forward and relieve airway obstruction.

**40. A nurse is caring for a patient with acute lymphoblastic leukemia (ALL). Which of the following is the most likely age range of the patient?**

- A. 3-10 years
- B. 25-35 years
- C. 45-55 years
- D. over 60 years

**Correct Answer: A. 3-10 years**

The peak incidence of ALL is at 4 years (range 3-10).

- **Option B:** It is uncommon after the mid-teen years.
- **Option C:** The peak incidence of chronic myelogenous leukemia (CML) is 45-55 years.
- **Option D:** The peak incidence of acute myelogenous leukemia (AML) occurs at 60 years. Two-thirds of cases of chronic lymphocytic leukemia (CLL) occur after 60 years.

**41. What is a characteristic of metasynthesis?**

- A. It is useful for triangulating research.
- B. It synthesizes critical masses of qualitative findings.
- C. It leads to higher reliability of research findings.
- D. It cannot be conducted on historical or case study findings.

**Correct Answer: B. It synthesizes critical masses of qualitative findings.**

Qualitative synthesis refers to a collection of different methods for systematically reviewing and integrating findings from qualitative studies. The aims of such methods are to capture the increasing volume of qualitative research, to facilitate the transfer of knowledge to improve healthcare and to bring together a broad range of participants and descriptions.

- **Option A:** Qualitative synthesis requires not only a systematic approach to collecting, analyzing, and interpreting results across multiple studies, but also to develop overarching interpretation emerging from the joint interpretation of the primary studies included in the synthesis.
- **Option C:** It involves going beyond the findings of any individual study to make the “whole into something more than the parts alone imply” They have been shown to be particularly useful to identify research gaps, to inform the development of primary studies, and to provide evidence for the development, implementation, and evaluation of health interventions
- **Option D:** Qualitative research sheds new light on scientific questions by emphasizing the participants’ subjective understanding and experience. Metasynthesis proposes a third level of comprehension and interpretation that brings original insights.

**42. Which of the following organisms is responsible for the development of rheumatic fever?**

- A. Streptococcal pneumonia
- B. Haemophilus influenza
- C. Group A beta-hemolytic streptococcus
- D. Staphylococcus aureus

**Correct Answer: C. Group A β-hemolytic streptococcus**

Rheumatic fever results from a delayed reaction to inadequately treated group A β-hemolytic streptococcal infection. In order for ARF to occur, it appears that a pharyngeal infection caused by *S. pyogenes* must occur in a host with a genetic susceptibility to the disease. Activation of the innate immune system begins with a pharyngeal infection that leads to the presentation of *S. pyogenes*

antigens to T and B cells.

- **Option A:** Streptococcus pneumoniae is a gram-positive, lancet-shaped bacterium and a cause of community-acquired pneumonia. Pneumococcal infections are present throughout the world and are most prevalent during the winter and early spring months. Streptococcus pneumoniae is the bacterium that has historically been the most common pathogen to cause CAP worldwide.
- **Option B:** Haemophilus influenzae disease is a name collectively used for any kind of infection caused by the bacteria called Haemophilus influenzae. The most familiar and predominant form is H. influenzae type b (Hib), which infects mostly children and immunocompromised individuals.
- **Option D:** Staphylococcus aureus is a major bacterial human pathogen that causes a wide variety of clinical manifestations. Infections are common both in community-acquired as well as hospital-acquired settings and treatment remains challenging to manage due to the emergence of multi-drug resistant strains such as MRSA (Methicillin-Resistant Staphylococcus aureus).

**43. A 35-year-old female has intense fear of riding an elevator. She claims “ As if I will die inside.” The client is suffering from:**

- A. Agoraphobia
- B. Social phobia
- C. Claustrophobia
- D. Xenophobia

**Correct Answer: C. Claustrophobia**

Claustrophobia is fear of closed space. Claustrophobia is a type of specific phobia, where one has a fear of closed spaces. Examples of closed spaces are engine rooms, MRI machines, elevators, etc. Those with specific phobias generally will report avoidance behaviors regarding the particular object or situation that triggers their fear. The fear can be expressed as a danger of harm, disgust, or experience of the physical symptoms in a phobic scenario. physical symptoms include, but are not limited to, difficulty breathing, trembling, sweating, tachycardia, dry mouth, and chest pain. Emotional symptoms include, but are not limited to, feeling overwhelming anxiety or fear, fear of losing control, feeling an intense need to leave the situation, the understanding of the fear as irrational, but an inability to overcome it.

- **Option A:** Agoraphobia is fear of open space or being a situation where escape is difficult. Agoraphobia is the anxiety that occurs when one is in a public or crowded place, from which a potential escape is difficult, or help may not be readily available. It is characterized by the fear that a panic attack or panic-like symptoms may occur in these situations. Individuals with agoraphobia, therefore, strive to avoid such situations or locations. In the currently-used DSM-5, agoraphobia is considered a distinct diagnosis that can occur independently of other diagnoses, such as generalized anxiety disorder or panic disorder. In the DSM-5, it is defined as “marked fear or anxiety about actual or anticipated exposure of public spaces, with the symptoms of fear or anxiety occurring most of the time in at least two of five common, different situations.”
- **Option B:** Social phobia is fear of performing in the presence of others in a way that will be humiliating or embarrassing. Social anxiety disorder (SAD) is characterized by excessive fear of embarrassment, humiliation, or rejection when exposed to possible negative evaluation by others when engaged in a public performance or social interactions. It is also known as social phobia. With the publication of DSM-5, the diagnostic criteria for SAD have been broadened from previous editions to include fear of acting in a way or show anxiety symptoms that offend others or lead to rejection in addition to fear of humiliation or embarrassment. Additionally, the latest edition of DSM



removed the generalized subtype and added the “performance only” specifier.

- **Option D:** Xenophobia is fear of strangers. Xenophobia, or fear of strangers, is a broad term that may be applied to any fear of someone who is different from us. Hostility towards outsiders is often a reaction to fear. It typically involves the belief that there is a conflict between an individual’s ingroup and an outgroup. Xenophobia often overlaps with forms of prejudice including racism and homophobia, but there are important distinctions. Where racism, homophobia, and other forms of discrimination are based on specific characteristics, xenophobia is usually rooted in the perception that members of the outgroup are foreign to the ingroup community.

**44. A 68-year-old retired schoolteacher, living independently, has been recently diagnosed with osteoporosis. She has a history of a minor fracture from a simple fall two years ago. The physiotherapist recommended a set of weight-bearing exercises to incorporate into her daily routine. During a follow-up visit to the clinic, the nurse inquires about her adherence to the exercises, only to find out she’s noncompliant. The patient, looking a bit discouraged, expresses doubts regarding the effectiveness of these exercises. Which response by the nurse is most appropriate?**

- A. "You're right. Exercise may not make a difference in your condition."
- B. "It's important to follow the exercises to improve your bone health."
- C. "I understand your concerns. Let's discuss alternative exercise options."
- D. "If you don't want to do the exercises, we can stop them altogether."

**Correct Answer: C. “I understand your concerns. Let’s discuss alternative exercise options.”**

This response is empathetic and offers a proactive solution. It acknowledges the patient’s feelings and offers a way to potentially address her concerns while still promoting her bone health. Acknowledging the patient’s concerns and working collaboratively can lead to better adherence and outcomes. In the context of the retired schoolteacher’s feelings of discouragement, it’s essential to approach her concerns with empathy and provide solutions that align with her comfort and needs.

- **Option A:** This response can further discourage the patient and is factually incorrect. Weight-bearing exercises have been shown to have beneficial effects on bone density in individuals with osteoporosis.
- **Option B:** While this statement is accurate, it may come across as dismissive and might not address the patient’s feelings or concerns, making her less likely to adhere to the recommendation.
- **Option D:** This statement might seem accommodating, but it doesn’t promote the patient’s health or address the underlying issue. By discontinuing the exercises, the patient may be at increased risk of further bone density loss and fractures.

**45. Claire, a 33 y.o. is on your floor with a possible bowel obstruction. Which intervention is a priority for her?**

- A. Obtain daily weights.
- B. Measure abdominal girth.
- C. Keep strict intake and output.

D. Encourage her to increase fluids.

**Correct Answer: B. Measure abdominal girth.**

Measuring abdominal girth provides quantitative information about increases or decreases in the amount of distention. Abdominal girths should be measured daily. Use the same measuring tape each time. Place the patient in the same position each time. Ensure that the tape measure is placed in the same position each time. This can be done by drawing small tick marks on the patient's abdomen to indicate the position of the tape. Measure the patient at the same time each day.

- **Option A:** Weigh daily; provides information about dietary needs and effectiveness of therapy. Avoid or limit foods that might cause or exacerbate abdominal cramping, flatulence (milk products, foods high in fiber or fat, alcohol, caffeinated beverages, chocolate, peppermint, tomatoes, orange juice).
- **Option C:** Monitor I&O; closely. Fluid and electrolyte losses must be replaced. Record intake and changes in symptomatology. Useful in identifying specific deficiencies and determining GI response to foods. Monitor I&O.; Note number, character, and amount of stools; estimate insensible fluid losses (diaphoresis). Measure urine specific gravity; observe for oliguria.
- **Option D:** Administer parenteral fluids, blood transfusions as indicated. Maintenance of bowel rest requires alternative fluid replacement to correct losses and anemia. Fluids containing sodium may be restricted in presence of regional enteritis.

**46. Dr. Jones prescribes albuterol sulfate (Proventil) for a patient with newly diagnosed asthma. When teaching the patient about this drug, the nurse should explain that it may cause:**

- A. Nasal congestion
- B. Nervousness
- C. Lethargy
- D. Hyperkalemia

**Correct Answer: B. Nervousness**

Albuterol may cause nervousness. The primary adverse effects of albuterol therapy are tremors and nervousness, mostly seen in children who are 2 to 6 years of age, though can be seen at any age. Tremors are the result of activation of the beta-2 receptors found on the motor nerve terminals which increases intracellular cAMP. These side effects occur in approximately one in every five patients. Other adverse effects of albuterol include tremor, dizziness, headache, tachycardia, palpitations, hypertension, heartburn, nausea, vomiting and muscle cramps.

- **Option A:** The inhaled form of the drug may cause dryness and irritation of the nose and throat, not nasal congestion. Monitoring parameters for albuterol include forced expiratory volume, peak flow, blood pressure, heart rate, central nervous system stimulation, serum potassium, serum glucose, and asthma symptoms.
- **Option C:** Other side effects include insomnia and nausea, which occur in approximately 1 in every ten patients. Less common adverse effects may include fever, bronchospasm, vomiting, headache, dizziness, cough, allergic reactions, otitis media, epistaxis, increased appetite, urinary tract infections, dry mouth, gas, hyperhidrosis, pain, dyspepsia, hyperactivity, chills, lymphadenopathy, ocular pruritus, sweating, conjunctivitis, and dysphonia.

- **Option D:** Albuterol also has been shown to increase blood pressure and may cause hypokalemia. Increased blood glucose concentrations and prolonged QTc interval and ST-segment depression have occurred, although rarely.

**47. On completing a fundal assessment, the nurse notes the fundus is situated on the client's left abdomen. Which of the following actions is appropriate?**

- A. Ask the client to empty her bladder.
- B. Straight catheterize the client immediately.
- C. Call the client's health provider for direction.
- D. Straight catheterize the client for half of her uterine volume.

**Correct Answer: A. Ask the client to empty her bladder.**

A full bladder may displace the uterine fundus to the left or right side of the abdomen. Massage the fundus every 15 minutes during the first hour, every 30 minutes during the next hour, and then, every hour until the patient is ready for transfer.

- **Option B:** Catheterization is unnecessary invasive if the woman can void on her own. Chart fundal height. Evaluate from the umbilicus using fingerbreadths. This is recorded as two fingers below the umbilicus (U/2), one finger above the umbilicus (1/U), and so forth. The fundus should remain in the midline. If it deviates from the middle, identify this and evaluate for a distended bladder.
- **Option C:** Be able to recognize the difference between a full bladder and a fundus. Full bladders may actually cause postpartum hemorrhage because it prevents the uterus from contracting appropriately. Nerve blocks may alter the sensation of a full bladder to the patient and prevent her from urinating.
- **Option D:** If at all possible, ambulate the patient to the bathroom. Urine output less than 300cc on initial void after delivery may suggest urinary retention. Document the fundal height and bladder status before the patient urinates. Reevaluate and document the fundal height and bladder status after the patient urinates to accurately document an empty bladder.

**48. Situation: A 30-year-old male employee frequently complains of low back pain that leads to frequent absences from work. Consultation and tests reveal negative results. The client has which somatoform disorder?**

- A. Somatization Disorder
- B. Hypochondriasis
- C. Conversion Disorder
- D. Somatoform Pain Disorder

**Correct Answer: D. Somatoform Pain Disorder**

This is characterized by severe and prolonged pain that causes significant distress. Pain disorder is fairly common. Although the pain is associated with psychological factors at its onset (e.g., unexplained chronic headache that began after a significant stressful life event), its onset, severity, exacerbation, or maintenance may also be associated with a general medical condition. Pain is the focus of the disorder, but psychological factors are believed to play the primary role in the perception of pain.

- **Option A:** This is a chronic syndrome of somatic symptoms that cannot be explained medically and is associated with psychosocial distress. Somatization disorder is a mental disorder characterized by recurring, multiple, and current, clinically significant complaints about somatic symptoms. It was recognized in the DSM-IV-TR classification system, but in the latest version of DSM-5, it was combined with undifferentiated somatoform disorder to become somatic symptom disorder, a diagnosis which no longer requires a specific number of somatic symptoms.
- **Option B:** This is an unrealistic preoccupation with a fear of having a serious illness. Illness anxiety disorder (IAD) is a recent term for what used to be diagnosed as hypochondriasis, or hypochondria. People diagnosed with IAD strongly believe they have a serious or life-threatening illness despite having no, or only mild, symptoms. Yet IAD patients' concerns are to them very real. Even if they go to doctors and no illnesses are found, they are generally not reassured and their obsessive worry continues.
- **Option C:** Characterized by alteration or loss in sensory or motor function resulting from a psychological conflict. Conversion disorder is a mental condition in which a person has blindness, paralysis, or other central nervous system (neurologic) symptoms that cannot be explained by medical evaluation. People who have conversion disorder are not making up their symptoms in order to obtain shelter, for example (malingering). They are also not intentionally injuring themselves or lying about their symptoms just to become a patient (factitious disorder). Some health care providers falsely believe that conversion disorder is not a real condition and may tell people that the problem is all in their head. But this condition is real. It causes distress and cannot be turned on and off at will.

**49. The emergency department nurse is assigned to provide care for a victim of a sexual assault. When following legal and agency guidelines, which intervention is most important?**

- Determine the assailant's identity
- Preserve the client's privacy
- Identify the extent of an injury
- Ensure an unbroken chain of evidence

**Correct Answer: D. Ensure an unbroken chain of evidence**

Establishing an unbroken chain of evidence is essential in order to ensure that the prosecution of the perpetrator can occur. Explain the forensic specimens you plan to collect; inform the client that they can be used for identification and prosecution of the rapist, for example blood, combing pubic hairs, semen samples, skin from underneath nails.

- **Option A:** Arrange for support follow-up: crisis counseling, group therapy, individual therapy, rape counselor, or a support group. Many individuals carry with them constant emotional distress and trauma. Depression and suicidal ideation are frequent sequelae of rape. As soon as the intervention is carried out, the less complicated the recovery may be.
- **Option B:** The nurse will also need to preserve the client's privacy and identify the extent of an injury. However, it is essential that the nurse follows legal and agency guidelines for preserving evidence. Provide strict confidentiality. The client's situation is not to be talked over with anyone other than the medical staff involved unless the client gives consent to it.
- **Option C:** Identifying the assailant is the job of law enforcement, not the nurse. Approach the client in a nonjudgmental manner. Nurses' attitudes can have an important therapeutic impact. Displays of shock, horror, disgust, or disbelief are not appropriate. Never use judgmental language.

**50. When being admitted to a mental health facility, a young female adult tells Nurse Mylene that the voices she hears frighten her. Nurse Mylene understands that the client tends to hallucinate more vividly:**

- A. While watching TV
- B. During mealtime
- C. During group activities
- D. After going to bed

**Correct Answer: D. After going to bed**

Auditory hallucinations are most troublesome when environmental stimuli are diminished and there are few competing distractions. Be alert for signs of increasing fear, anxiety or agitation. Might herald hallucinatory activity, which can be very frightening to client, and client might act upon command hallucinations (harm self or others). Explore how the hallucinations are experienced by the client. Exploring the hallucinations and sharing the experience can help give the person a sense of power that he or she might be able to manage the hallucinatory voices.

- **Option A:** Help the client to identify the needs that might underlie the hallucination. What other ways can these needs be met? Hallucinations might reflect needs for anger, power, self-esteem, and sexuality. Help the client to identify times that the hallucinations are most prevalent and frightening. Helps both nurse and client identify situations and times that might be most anxiety-producing and threatening to the client.
- **Option B:** Stay with clients when they are starting to hallucinate and direct them to tell the “voices they hear” to go away. Repeat often in a matter-of-fact manner. The client can sometimes learn to push voices aside when given repeated instructions. especially within the framework of a trusting relationship.
- **Option C:** Decrease environmental stimuli when possible (low noise, minimal activity). Decrease the potential for anxiety that might trigger hallucinations. Helps calm the client. Work with the client to find which activities help reduce anxiety and distract the client from a hallucinatory material. Practice new skills with the client. If clients’ stress triggers hallucinatory activity, they might be more motivated to find ways to remove themselves from a stressful environment or try distraction techniques.

**51. Which of the following should the nurse do first for a 15-year-old boy with a full leg cast who is screaming in unrelenting pain and exhibiting right foot pallor signifying compartment syndrome?**

- A. Medicate him with acetaminophen.
- B. Notify the physician immediately.
- C. Release the traction.
- D. Monitor him every 5 minutes.

**Correct Answer: B. Notify the physician immediately**

Compartment syndrome is an emergent situation and the physician needs to be notified immediately so that interventions can be initiated to relieve the increasing pressure and restore circulation.

Compartment syndrome is a painful condition that occurs when pressure within the muscles builds to dangerous levels. This pressure can decrease blood flow, which prevents nourishment and oxygen from reaching nerve and muscle cells.

- **Option A:** Acetaminophen (Tylenol) will be ineffective since the pain is related to the increasing pressure and tissue ischemia. Acute compartment syndrome is a surgical emergency. There is no effective non-surgical treatment.
- **Option C:** The cast, not traction, is being used in this situation for immobilization, so releasing the traction would be inappropriate. Casts and tight bandages may lead to compartment syndrome. If symptoms of compartment syndrome develop, remove or loosen any constricting bandages. If there is a cast, contact the doctor immediately.
- **Option D:** In this situation, specific action not continued monitoring is indicated. In acute compartment syndrome, unless the pressure is relieved quickly, permanent disability and tissue death may result.

**52. A newly admitted client has started taking bupropion (Wellbutrin). The nurse monitors which of the following side effects would indicate an overdose of the medication?**

- A. Insomnia
- B. Dizziness
- C. Constipation

Correct Answer: D. Seizure.

**Correct Answer: D. Seizure.**

Wellbutrin (bupropion) is an antidepressant medication used to treat major depressive disorder and seasonal affective disorder. Overdose symptoms may include seizure, muscle stiffness, hallucinations, fast or uneven heartbeat, shallow breathing, or fainting.

- **Options A, B, and C:** Insomnia, dizziness, and constipation are the common side effects of the medication.

**53. A 23-year-old client who has been admitted with a diagnosis of schizophrenia says to the nurse “Yes, it’s March, March is a little woman”. That’s literal you know”. These statements illustrate:**

- A. Neologisms
- B. Echolalia
- C. Flight of ideas
- D. Loosening of association

**Correct Answer: D. Loosening of association**

Loose associations are thoughts that are presented without the logical connections usually necessary for the listener to interpret the message. A thought disturbance demonstrated by speech that is disconnected and fragmented, with the individual jumping from one idea to another unrelated or indirectly related idea. It is essentially equivalent to derailment.

- **Option A:** A new word that is coined especially by a person affected with schizophrenia and is meaningless except to the coiner, and is typically a combination of two existing words or a shortening or distortion of an existing word.
- **Option B:** Echolalia is a mechanical repetition of words and phrases uttered by another individual. It is often a symptom of a neurological or developmental disorder, particularly catatonic schizophrenia or autism.
- **Option C:** 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.

**54. In a university hospital's grand rounds, a complex case of a 30-year-old patient with recurrent Neisserial infections is presented. The immunologists highlight the patient's inherited deficiency in the complement system, underscoring the pivotal role it plays in bolstering the immune response against certain bacterial pathogens. The case elucidates how the complement cascade, once triggered, orchestrates a series of reactions that aim to neutralize the invading pathogens through opsonization, chemotaxis, and the formation of Membrane Attack Complexes (MAC) leading to cell lysis. This clinical narrative unravels into a comprehensive immunology lecture, where the professor delves into the array of proteins comprising the complement system and their indispensable contributions to both innate and adaptive immunity. The students are then prompted to identify which among the following options accurately encapsulates the essence of the complement system, a conglomeration of approximately 20 proteins found in plasma pivotal for inflammation, phagocytosis, and cell lysis.**

- A. Interferons
- B. Complement
- C. Prostaglandins
- D. Natural killer cells

**Correct Answer: B. Complement**

The complement system is a complex network of about 20 proteins that work together to help the immune system destroy foreign invaders, trigger inflammation, promote phagocytosis, and cause cell lysis through the formation of Membrane Attack Complexes (MAC).

- **Option A:** Interferons are a group of signaling proteins made and released by host cells in response to the presence of several viruses. While interferons have antiviral properties and modulate the immune system, they do not represent the complement system which is specifically a group of proteins that act in a cascade to defend against bacterial infections.
- **Option C:** Prostaglandins are lipid compounds that perform several functions in the body including inducing fever, inflammation, and pain, aiding the healing process. However, they do not correspond to the complement system which is a distinct set of proteins involved in immune defense.

- **Option D:** Natural Killer (NK) cells are a type of white blood cell that have the ability to recognize and destroy virus-infected cells and tumor cells. However, they are not associated with the complement system which is primarily a group of plasma proteins acting in a cascade to defend against pathogens.

**55. The nurse is suspected of charting medication administration that he did not give. After talking to the nurse, the charge nurse should:**

- A. Call the Board of Nursing
- B. File a formal reprimand
- C. Terminate the nurse
- D. Charge the nurse with a tort

**Correct Answer: B. File a formal reprimand**

The next action after discussing the problem with the nurse is to document the incident by filing a formal reprimand. As a rule of thumb, nurses should avoid making assumptions when they notice gaps or missing information in a patient's treatment documentation. Healthcare professionals have exceedingly demanding schedules, but it's always better to take the time and double-check the details than to make assumptions and be wrong.

- **Option A:** If the behavior continues, the nurse should be reported to the Board of Nursing. Understanding these realities can add hours to the day, so the practical approach is to be strategic with efforts. Look for efficiency, work with colleagues, and use best judgment and ingenuity to find ways to get everything done while still doing it right. It's not easy, but it's also not impossible.
- **Option C:** If the behavior continues or if harm has resulted to the client, the nurse may be terminated, but these are not the first actions requested in the stem. Details save lives, and consistently getting them right is what makes people feel safe when they go to the doctor. Moreover, it's also what keeps nurses from having to defend their actions in a courtroom someday.
- **Option D:** A tort is a wrongful act to the client or his belongings and is not indicated in this instance. A tort is a civil wrong that causes harm to another person by violating a protected right. A civil wrong is an act or omission that is intentional, accidental, or negligent, other than a breach of contract. The specific rights protected give rise to the unique "elements" of each tort. Tort requires the presence of four elements that are the essential facts required to prove a civil wrong.

**56. John Reid is admitted to the hospital and is currently receiving hypertonic fluids. Nursing management for the client includes monitoring for all of the following potential complications except:**

- A. Water intoxication
- B. Fluid volume excess (FVE)
- C. Cellular dehydration
- D. Cell shrinkage

**Correct Answer: A. Water intoxication**

Water intoxication is a potential complication associated with hypotonic fluid administration. Water intoxication provokes disturbances in electrolyte balance, resulting in a rapid decrease in serum sodium



concentration and eventual death. The development of acute dilutional hyponatremia causes neurological symptoms because of the movement of water into the brain cells, in response to the fall in extracellular osmolality. Other choices are potential complications of hypertonic fluid administration.

- **Option B:** Fluid Volume Excess (FVE), or hypervolemia, refers to an isotonic expansion of the ECF due to an increase in total body sodium content and an increase in total body water. This fluid overload usually occurs from compromised regulatory mechanisms for sodium and water as seen commonly in heart failure (CHF), kidney failure, and liver failure.
- **Option C:** Water moves from inside the cells to the bloodstream to maintain the needed amount of blood (blood volume) and blood pressure. If dehydration continues, tissues of the body begin to dry out, and cells begin to shrivel and malfunction.
- **Option D:** Cell shrinkage, or the loss of cell volume, is a ubiquitous characteristic of programmed cell death that is observed in all examples of apoptosis, independent of the death stimulus. This decrease in cell volume occurs in synchrony with other classical features of apoptosis.

**57. The nurse is reviewing the laboratory results of a client receiving chemotherapy. The platelet count is 10,000 cells/mm. Based on this laboratory value, the priority nursing assessment is which of the following?**

- A. Assess skin turgor
- B. Assess bowel sounds
- C. Assess temperature
- D. Assess level of consciousness

**Correct Answer: D. Assess level of consciousness**

- **Option D:** A high risk of hemorrhage exists when the platelet count is fewer than 20,000. Fatal central nervous system hemorrhage or massive gastrointestinal hemorrhage can occur when the platelet count is fewer than 10,000. The client should be assessed for changes in levels of consciousness, which may be an early indication of an intracranial hemorrhage.
- **Option A:** Skin turgor will be assessed if there is a presence of dehydration in a patient with low platelet count but it is not the priority.
- **Option B:** Bowel sounds will be assessed when there is a presence of gastrointestinal complications such as constipation, diarrhea, and radiation enteritis.
- **Option C:** Assessing the temperature is a priority nursing assessment when the white blood cell count is low and the client is at risk for an infection.

**58. He raised the issue of giving priority to patient needs. Which of the following offers the best way for setting priority?**

- A. Assessing nursing needs and problems.
- B. Giving instructions on how nursing care needs are to be met.
- C. Controlling and evaluating the delivery of nursing care.
- D. Assigning a safe nurse: patient ratio.

**Correct Answer: A. Assessing nursing needs and problems.**

This option follows the framework of the nursing process and at the same time applies the management process of planning, organizing, directing, and controlling. At the basic level, management is a regimen that comprises five standard functions, namely, planning, organizing, staffing, leading, and controlling. These functions are part of a body of practices and theories that educate on becoming an efficient manager.

- **Option B:** Leading is a function that involves stating a vision, influencing, persuading, motivating, and inspiring employees. An efficient and effective management process aligns individual interests with the organization's goals and objectives as a whole.
- **Option C:** Evaluate the achievement of goals, improvement in performance, and the ability to take action. Put processes in place to help you establish standards, so you can measure, compare, and make decisions.
- **Option D:** Enlisting and recruiting employees for positions within the various teams and departments in an organized manner. The staffing process helps in getting the right people for the right job at right time. The function of staffing helps the management to decide the number of employees needed for the organization and with what qualifications and experience.

**59. A client is admitted with a diagnosis of Sturge-Weber syndrome. Which of the following information would you expect to find in this client?**

- A. It is a dysfunction of the trigeminal nerve causing a severe sharp pain in the nose, lips, gums, or across the cheeks.
- B. It is a non-progressive neurological disorder of the seventh cranial nerve causing paralysis of one of the sides of the face.
- C. It is a rare degenerative brain disorder characterized by sudden development of progressive neurological and neuromuscular symptoms.
- D. It is a neurocutaneous disorder with angiomas causing abnormalities in the skin, brain, and eyes from birth.

**Correct Answer: D. It is a neurocutaneous disorder with angiomas causing abnormalities in the skin, brain, and eyes from birth.**

Sturge-Weber syndrome, also known as encephalofacial or encephalotrigeminal angiomatosis, is a neurocutaneous syndrome that is associated with a port-wine birthmark (facial port-wine stains in the trigeminal nerve distribution), vascular lesions in the ipsilateral brain and meninges, and eye problems such as glaucoma.

- **Option A:** It is a description of a client with Trigeminal neuralgia.
- **Option B:** It is a description of a client with a Bell's Palsy.
- **Option C:** It is a description of a client with Creutzfeldt-Jakob disease (CJD).

**60. The nurse is preparing to take vital signs in an alert client admitted to the hospital with dehydration secondary to vomiting and diarrhea. What is the best method used to assess the client's temperature?**

- A. Oral
- B. Axillary

C. Radial

D. Heat sensitive tape

**Correct Answer: B. Axillary**

Axilla is the most accessible body part in this situation. Body temperature is a numerical expression of the body's heat and metabolic activity balance and can be a major indicator of a person's health status. Assessing a patient's body temperature is a common procedure nurses perform to monitor for signs of infection, environmental exposure, shock, ovulation, or therapeutic response to medications or medical procedures. A normal body temperature can be a potentially positive sign that the patient isn't experiencing a disease process, infection, or trauma and that the body's cells, tissues, and organs aren't under metabolic distress.

- **Option A:** The esophageal temperature probe (ETP) is an 18-in (45.7 cm) long, thin, flexible catheter that has a rounded tip that should be lubricated with water-soluble lubricant before being placed through the nares or mouth, extending into the esophagus at least 2 to 3 in (5 to 7.6 cm). The external end portion of the catheter has a small, coated wire with a plug that can be attached to a telemetry monitor for continuous temperature monitoring.
- **Option C:** The ETP and RTP (rectal temperature probe) are the same device but can be used in either orifice depending on the patient's medical condition. Again, the tip should be lubricated with water-soluble lubricant, and then placed approximately 3 in (7.6 cm) inside the rectal vault. The RTP can also be attached to a telemetry monitor cable for continuous temperature monitoring.
- **Option D:** This is a latex-free, disposable, adhesive strip that can be applied to the forehead. These strips contain embedded liquid crystals and chemical compounds that react to the temperature (heat) of the skin by changing colors. After it has been on the forehead for approximately 2 minutes, the color will illuminate a line and correlate numeric temperature. The strips measure temperatures ranging from 96.6[degrees] F to 104.6[degrees] F (35.8[degrees] C to 40.3[degrees] C). Consider use for infants, children, and adults with cognitive deficits because they're painless.

**61. The nurse is caring for a primigravida at about 2 months and 1-week gestation. After explaining self-care measures for common discomforts of pregnancy, the nurse determines that the client understands the instructions when she says:**

- A. "Nausea and vomiting can be decreased if I eat a few crackers before rising."
- B. "If I start to leak colostrum, I should cleanse my nipples with soap and water."
- C. "If I have a vaginal discharge, I should wear nylon underwear."
- D. "Leg cramps can be alleviated if I put an ice pack on the area."

**Correct Answer: A. "Nausea and vomiting can be decreased if I eat a few crackers before arising"**

Eating dry crackers before arising can assist in decreasing the common discomfort of nausea and vomiting. Avoiding strong food odors and eating a high-protein snack before bedtime can also help.

- **Option B:** Colostrum is a milky fluid that's released by mammals that have recently given birth before breast milk production begins.
- **Option C:** Cotton underwear is breathable and absorbent, which can help prevent yeast infections.

- **Option D:** A heating pad or hot pack may help relieve tight muscles in leg cramps.

**62. The following lab results are received for a patient. Which of the following results are abnormal? Select all that apply.**

- A. Hemoglobin 10.4 g/dL.
- B. Total cholesterol 340 mg/dL.
- C. Total serum protein 7.0 g/dL.
- D. Glycosylated hemoglobin A1C 5.4%.
- E. WBC count  $5.5 \times 10^9/L$

**Correct Answer: A & B**

- **Option A:** CBC includes measurement of hemoglobin level in the blood. Normal concentrations of hemoglobin are approximately 13.5-18.0 grams per deciliter in men and 11.5-16.0 grams per deciliter in women. CBC also measures the size of erythrocytes through the mean corpuscular volume (MCV).
- **Option B:** Total cholesterol levels of 200 mg/dL or below are considered normal. Cholesterol level measurement is from serum. A non-fasting lipid test can be done anytime without fasting; a fasting lipid test requires a 12-hour fast except for water. Total and HDL cholesterol are measured directly from serum.
- **Option C:** The normal serum protein is 6 to 8 g/dl. A total serum protein test measures the total amount of protein in the blood. It also measures the amounts of two major groups of proteins in the blood: albumin and globulin. A test for total serum protein reports separate values for total protein, albumin, and globulin. Some types of globulin (such as alpha-1 globulin) also may be measured.
- **Option D:** The normal glycosylated hemoglobin A1C is between 4% and 5.6%. Glycosylated hemoglobin is a hemoglobin to which glucose is bound. Glycosylated hemoglobin is tested to monitor the long-term control of diabetes mellitus.
- **Option E:** The normal WBC count is 4.5 to  $11.0 \times 10^9/L$ . The normal range of values for white blood cells is 4,000 to 11,000/mL. Anything below this range is leukopenia, and anything that exceeds this range qualifies as leukocytosis. Clinically, the complete blood count (CBC) test measures leukocytes. A CBC is frequently ordered to provide insight into disease processes and includes measurements of the leukocytes, as well as red blood cell and platelet totals.

**63. When developing a teaching plan for a group of high school students about teenage pregnancy, the nurse would keep in mind which of the following?**

- A. The incidence of teenage pregnancies is increasing.
- B. Most teenage pregnancies are planned.
- C. Denial of the pregnancy is common early on.
- D. The risk for complications during pregnancy is rare.

**Correct Answer: C. Denial of the pregnancy is common early on.**

The adolescent who becomes pregnant typically denies the pregnancy early on. Early recognition by a parent or health care provider may be crucial to timely initiation of prenatal care.

- **Option A:** The incidence of adolescent pregnancy has declined since 1991, yet morbidity remains high.
- **Option B:** Most teenage pregnancies are unplanned and occur out of wedlock.
- **Option D:** The pregnant adolescent is at high risk for physical complications including premature labor and low-birth-weight infants, high neonatal mortality, iron deficiency anemia, prolonged labor, and fetopelvic disproportion as well as numerous psychological crises.

**64. When auscultating the apical pulse of a client who has atrial fibrillation, the nurse would expect to hear a rhythm that is characterized by:**

- A. The presence of occasional coupled beats.
- B. Long pauses in an otherwise regular rhythm.
- C. A continuous and totally unpredictable irregularity.
- D. Slow but strong and regular beats.

**Correct Answer: C. A continuous and totally unpredictable irregularity.**

In atrial fibrillation, multiple ectopic foci stimulate the atria to contract. The AV node is unable to transmit all of these impulses to the ventricles, resulting in a pattern of highly irregular ventricular contractions. Due to its rhythm irregularity, blood flow through the heart becomes turbulent and has a high chance of forming a thrombus (blood clot), which can ultimately dislodge and cause a stroke. Atrial fibrillation is the leading cardiac cause of stroke.

- **Option A:** The most common sensation associated with PVCs is that of a skipped heartbeat followed by a fluttering sensation. Patients commonly present complaining of heart palpitations. The vast majority of patients are entirely asymptomatic as there are no associated symptoms with the palpitations.
- **Option B:** In the presence of a pause, one should exclude premature complexes with compensatory pause. If the ectopic beat failed to reset the sinus node, the premature complex would be followed by a compensatory pause, i.e. the R-R interval after the premature complex is longer than the R-R interval between normal sinus beats.
- **Option D:** Having bradycardia means that the heart beats very slowly. For most people, a heart rate of 60 to 100 beats a minute while at rest is considered normal. If the heart beats less than 60 times a minute, it is slower than normal. For some people, a slow heart rate does not cause any problems. It can be a sign of being very fit. Healthy young adults and athletes often have heart rates of less than 60 beats a minute.

**65. Which of the following could be considered the “context” of a study? Select all that apply.**

- A. Cultural understandings and beliefs of study participants.
- B. The physical setting of the study.
- C. The sample selected for the study.
- D. The number of subjects in the study.
- E. The research design used.

**Correct Answers: A, B**

Contextual perspective is an essential aspect of a research proposal and requires critical attention while writing the proposal. In the Introduction section of the proposal, the writer should try to create interest in the readers about the proposed research.

- **Option A:** Contextual perspectives consider the relationship between individuals and their physical, cognitive, and social worlds. They also examine socio-cultural and environmental influences on development.
- **Option B:** Simply put, a research setting is the physical, social, or experimental context within which research is conducted. In a research paper, describing this setting accurately is crucial since the results and their interpretation may depend heavily on it.
- **Option C:** The sample is not included in the context of the study. Make sure to include relevant references and citations. If presented adequately, the contextual perspective effectively establishes not only the need for the proposed research but also indicates the expertise of the writer in that specific research area.
- **Option D:** The number of subjects is not included in the context of the study. It is also called a sample. Establish context by providing a brief and balanced review of the pertinent published literature that is available on the subject. The key is to summarize for the reader what is known about the specific research problem before the researcher did an analysis. This part of the introduction should not represent a comprehensive literature review—that comes next.
- **Option E:** The research design used is seen in the methodology. The context of the study consists of a general review of the important, foundational research literature [with citations] that establishes a foundation for understanding key elements of the research problem.

**66. Kellan, a high school student is referred to the school nurse for suspected substance abuse. Following the nurse's assessment and interventions, what would be the most desirable outcome?**

- A. The student discusses conflicts over drug use.
- B. The student accepts a referral to a substance abuse counselor.
- C. The student agrees to inform his parents of the problem.
- D. The student reports increased comfort with making choices.

**Correct Answer: B. The student accepts a referral to a substance abuse counselor**

All of the outcomes stated are desirable; however, the best outcome is that the student would agree to seek the assistance of a professional substance abuse counselor. The basic goal for a client in any substance abuse treatment setting is to reduce the risk of harm from continued use of substances. The greatest degree of harm reduction would obviously result from abstinence, however, the specific goal for each individual client is determined by his consumption pattern, the consequences of his use, and the setting in which the brief intervention is delivered.

- **Option A:** Primary care providers find many brief intervention techniques effective in addressing the substance abuse issues of clients who are unable or unwilling to access specialty care. Examples of brief interventions include asking clients to try nonuse to see if they can stop on their own, encouraging interventions directed toward attending a self-help group (e.g., Alcoholics Anonymous [AA] or Narcotics Anonymous [NA]), and engaging in brief, structured, time-limited efforts to help pregnant clients stop using.

- **Option C:** The clinician can use brief interventions to motivate particular behavioral changes at each stage of this process. For example, in the contemplation stage, a brief intervention could help the client weigh the costs and benefits of change. In the preparation stage, a similar brief intervention could address the costs and benefits of various change strategies (e.g., self-change, brief treatment, intensive treatment, self-help group attendance). In the action stage, brief interventions can help maintain motivation to continue on the course of change by reinforcing personal decisions made at earlier stages.
- **Option D:** To consider change, clients at the precontemplation stage must have their awareness raised. To resolve their ambivalence, clients in the contemplation stage must be helped to choose positive change over their current circumstances. Clients in the preparation stage need help in identifying potential change strategies and choosing the most appropriate ones. Clients in the action stage need help to carry out and comply with the change strategies.

**67. Glucose is an important molecule in a cell because this molecule is primarily used for:**

- A. Extraction of energy
- B. Synthesis of protein
- C. Building of genetic material
- D. Formation of cell membranes

**Correct Answer: A. Extraction of energy**

Glucose catabolism is the main pathway for cellular energy production. It is a ubiquitous source of energy for every organism in the world and is essential to fuel both aerobic and anaerobic cellular respiration. Once glucose is in the body, it travels through the blood and to energy-requiring tissues.

- **Option B:** Protein synthesis involves a complex interplay of many macromolecules. As one of the foundational concepts in biology, protein synthesis is sufficiently complex that many believe it evolved once, giving the protein synthetic machinery in all organisms on the planet a common ancestry.
- **Option C:** DNA is made of chemical building blocks called nucleotides. These building blocks are made of three parts: a phosphate group, a sugar group, and one of four types of nitrogen bases. To form a strand of DNA, nucleotides are linked into chains, with the phosphate and sugar groups alternating.
- **Option D:** The formation of biological membranes is based on the properties of lipids, and all cell membranes share a common structural organization: bilayers of phospholipids with associated proteins. In addition, membrane proteins control the interactions between cells of multicellular organisms.

**68. A patient received surgery and chemotherapy for colon cancer, completing therapy 3 months previously, and she is now in remission. At a follow-up appointment, she complains of fatigue following activity and difficulty with concentration at her weekly bridge games. Which of the following explanations would account for her symptoms?**

- A. The symptoms may be the result of anemia caused by chemotherapy.

- B. The patient may be immunosuppressed.
- C. The patient may be depressed.
- D. The patient may be dehydrated.

**Correct Answer: A. The symptoms may be the result of anemia caused by chemotherapy.**

Three months after surgery and chemotherapy the patient is likely to be feeling the after-effects, which often includes anemia because of bone-marrow suppression. The side effects of cancer chemotherapy can be acute or prolonged, and may need monitoring. It would require multi-disciplinary monitoring as certain patient populations may be at higher risk for complications. Interventions like exercise, optimizing sleep quality, and behavioral therapies such as relaxation can help fatigue.

- **Option B:** There is no evidence that the patient is immunosuppressed, and fatigue is not a typical symptom of immunosuppression. Common toxicities associated with such agents include myelosuppression, nausea, vomiting, GI side effects, mucositis, alopecia, sterility, infertility, and infusion reactions. Furthermore, there is an increased risk of infections due to immunosuppression.
- **Option C:** Patients undergoing chemotherapy usually need strong emotional support, and they are going through anxiety, depression, and anticipatory grief from the expected side effects of the drugs. Multidisciplinary and interprofessional interventions at various stages of their treatment regimen can promote mental health. However, it is not indicated in this stem.
- **Option D:** The information given does not indicate that dehydration is a cause of her symptoms. Chemotherapy-induced nausea and vomiting treatment options include prochlorperazine, haloperidol, metoclopramide, lorazepam, dexamethasone, ondansetron, granisetron, dolasetron, palonosetron, dronabinol, aprepitant, fosaprepitant, netupitant. palonosetron has a longer half-life, better efficacy, and higher binding affinity than granisetron.

**69. The nurse is caring for a female client following a Billroth II procedure. Which postoperative order should the nurse question and verify?**

- A. Leg exercises
- B. Early ambulation
- C. Irrigating the nasogastric tube
- D. Coughing and deep-breathing exercises

**Correct Answer: C. Irrigating the nasogastric tube.**

In a Billroth II procedure, the proximal remnant of the stomach is anastomosed to the proximal jejunum. Patency of the nasogastric tube is critical for preventing the retention of gastric secretions. The nurse should never irrigate or reposition the gastric tube after gastric surgery unless specifically ordered by the physician. In this situation, the nurse should clarify the order.

- **Option A:** Leg exercises are allowed to prevent thrombosis. 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 B:** Early ambulation is recommended after the procedure. Also, discuss the reasons for and importance of cessation of smoking. Smoking stimulates gastric acid production and may cause vasoconstriction, compromising mucous membranes and increasing the risk of gastric irritation and ulceration.



- **Option D:** The client may do coughing and deep breathing exercises. Discuss and identify stressful situations and how to avoid them. Investigate job-related issues. This can alter gastric motility, interfering with optimal digestion. The patient may require vocational counseling if a change in employment is indicated.

**70. You are providing nursing care for a newborn infant with respiratory distress syndrome (RDS) who is receiving nasal CPAP ventilation. What complications should you monitor for this infant?**

- A. Pulmonary embolism
- B. Bronchitis
- C. Pneumothorax
- D. Pneumonia

**Correct Answer: C. Pneumothorax**

The most common complications after birth for infants with RDS is pneumothorax. Alveoli rupture and air leaks into the chest and compresses the lungs, which makes breathing difficult. Pulmonary air leak syndromes such as pneumothorax and pneumomediastinum may also present as respiratory distress, but the onset of symptoms may be more acute.

- **Option A:** Complications of neonatal respiratory distress syndrome are related mainly to the clinical course of RDS in neonates and the long term outcomes of the neonates. While surfactant therapy has decreased the morbidity associated with RDS, many patients continue to have complications during and after the acute course of RDS.
- **Option B:** Acute complications due to positive pressure ventilation or invasive mechanical ventilation include air-leak syndromes such as pneumothorax, pneumomediastinum, and pulmonary interstitial emphysema. There is also an increase in the incidence of intracranial hemorrhage and patent ductus arteriosus in very low birth weight infants with RDS, although independently linked to prematurity itself.
- **Option D:** BPD is a chronic complication of RDS. The pathophysiology of BPD involves both arrested lung development as well as lung injury and inflammation. Besides a surfactant deficiency, the immature lung of the premature infant has decreased compliance, decreased fluid clearance, and immature vascular development, which predisposes the lung to injury and inflammation, further disrupting the normal development of alveoli and pulmonary vasculature.

**71. Marlyn is diagnosed with anorexia nervosa and is admitted to the special eating disorder unit. The initial treatment priority for her is:**

- A. To determine her current body image.
- B. To identify family interaction patterns.
- C. To initiate a refeeding program.
- D. To promote the client's independence.

**Correct Answer: C. To initiate a refeeding program.**

The physical need to reestablish near-normal weight takes priority because of the physiologic, life-threatening consequences of anorexia. Maintain a regular weighing schedule, such as Monday and

Friday before breakfast in the same attire, and graph results; provides an accurate ongoing record of weight loss or gain. Also diminishes obsessing about changes in weight. Make a selective menu available, and allow the patient to control choices as much as possible. Patient who gains confidence in herself and feels in control of the environment is more likely to eat preferred foods.

- **Option A:** Establish a minimum weight goal and daily nutritional requirements. Malnutrition is a mood-altering condition, leading to depression and agitation and affecting cognitive function and decision-making. Improved nutritional status enhances thinking ability, allowing initiation of psychological work. Weigh with back to scale (depending on program protocols). Although some programs prefer the patient to see the results of the weighing, this can force the issue of trust in the patient who usually does not trust others.
- **Option B:** Involve the patient in setting up or carrying out a program of behavior modification. Provide a reward for weight gain as individually determined; ignore the loss. Provides structured eating situations while allowing the patient some control in choices. Behavior modification may be effective in mild cases or for short-term weight gain.
- **Option D:** Use a consistent approach. Sit with the patient while eating; present and remove food without persuasion and comment. Promote a pleasant environment and record intake. Patient detects urgency and may react to pressure. Any comment that might be seen as coercion provides focus on food. When staff responds in a consistent manner, the patient can begin to trust staff responses. The single area in which the patient has exercised power and control is food or eating, and he or she may experience guilt or rebellion if forced to eat. Structuring meals and decreasing discussions about food will decrease power struggles with the patient and avoid manipulative games.

**72. A 28-year-old woman, in her second pregnancy, visits the prenatal clinic. During her first pregnancy, she did not receive any postnatal Rhogam shots. Her medical records indicate that she is RH negative. The father of the child, however, is RH positive. Given the potential risks associated with Rh incompatibility and the importance of preventive care, under which circumstances would Rhogam most likely be administered to the mother to prevent hemolytic disease in the infant?**

- A. When the mother is RH positive and the infant is RH positive.
- B. When the mother is RH positive and the infant is RH negative.
- C. When the mother is RH negative and the infant is RH positive.
- D. When the mother is RH negative and the infant is RH negative.
- E. When both the mother and the infant have an unknown RH status.
- F. When the mother has previously received Rhogam in a prior pregnancy.

**Correct Answer: C. When the mother is RH negative and the infant is RH positive.**

Rhogam (Rho(D) immune globulin) is given to RH negative mothers to prevent the development of antibodies against RH positive blood. This is crucial when an RH negative mother has an RH positive infant, as the mother's body may see the baby's RH positive red blood cells as foreign and develop antibodies against them, leading to hemolytic disease in the infant. Rhogam is administered to prevent this immune response.

**73. A nurse is teaching a client with left leg weakness to walk with a cane. The nurse should include which nursing points about safe cane use in the client teaching? Select all that apply.**

- A. Place the cane 8" to 10" from the base of the little toe.
- B. Hold the cane on the uninvolved side of the body.
- C. Adjust the cane so that the handle is level with the hip bone.
- D. Walk by moving the involved leg, then the cane, and then the uninvolved leg.
- E. Shorten the stride length on the involved side.
- F. Avoid leaning on the cane to get in and out of a chair.

**Correct Answer: B, C, & F.**

A cane can be helpful if there are minor problems with balance or stability, some weakness in the leg or trunk, an injury, or pain. If elderly, using a single point cane may help to walk more comfortably and safely and, in some cases, may make it easier to continue living independently.

- **Option A:** The cane base should be placed 4? to 6? from the base of the little toe. The elbow should be slightly bent when holding the cane.
- **Option B:** Hold the cane in the hand opposite the side that needs support. For example, if the left leg is injured, hold the cane in the right hand.
- **Option C:** To ambulate safely, a client with leg weakness should hold the cane in the hand opposite the involved leg with the handle level adjacent to the hip bone. When standing up straight, the top of the cane should reach the crease in the wrist.
- **Option D:** When walking, the client should move the cane and involved leg simultaneously, alternating with the uninvolved leg in equal length strides and timing.
- **Option E:** To start, set the cane about one small stride ahead and step off on the injured leg. Finish the step with the good leg.
- **Option F:** The client should not lean on the cane to get in or out of a chair because of the risk of falls.

**74. Propranolol (Inderal) is used in the mental health setting to manage which of the following conditions?**

- A. Antipsychotic-induced akathisia and anxiety.
- B. Obsessive-compulsive disorder (OCD) to reduce ritualistic behavior.
- C. Delusions for clients suffering from schizophrenia.
- D. The manic phase of bipolar illness as a mood stabilizer.

**Correct Answer: A. Antipsychotic-induced akathisia and anxiety**

Propranolol is a potent beta-adrenergic blocker and produces a sedating effect, therefore it is used to treat antipsychotic-induced akathisia and anxiety. Off-label use of propranolol includes the use in performance anxiety, which is a subset of a social phobia presenting with tachycardia, sweating, and flushing that occurs secondary to increased activation of the sympathetic nervous system.

- **Option B:** OCD is most commonly treated with SSRIs, and at much higher doses than used to treat anxiety or depression. FDA-approved SSRIs include fluoxetine, fluvoxamine, paroxetine, and sertraline. The following are appropriate drugs and doses typically used to treat OCD: fluoxetine 80 mg, escitalopram 40 mg, 300 mg fluvoxamine, and 100 mg paroxetine.
- **Option C:** For the initial treatment of acute psychosis, it is recommended to commence an oral second-generation antipsychotics (SGA) such as aripiprazole, olanzapine, risperidone, quetiapine, asenapine, lurasidone, sertindole, ziprasidone, aripiprazole, molindone, iloperidone, etc. Sometimes, if clinically needed, alongside a benzodiazepine such as diazepam, clonazepam, or lorazepam to control behavioral disturbances and non-acute anxiety. First-generation antipsychotic (FGA) like trifluoperazine, Fluphenazine, haloperidol, pimozide, sulpiride, flupentixol, chlorpromazine, etc. are not commonly used as the first line but can be used.
- **Option D:** A large meta-analysis of medications used in acute mania showed that atypical antipsychotics were more effective than mood stabilizers for this purpose but not necessarily for maintenance of bipolar disorder. The most effective medications are risperidone, olanzapine, and haloperidol. Lithium, quetiapine, and aripiprazole were comparatively effective. Valproic acid, carbamazepine, and ziprasidone were more efficacious than placebo but less so than their previously mentioned competitors.

**75. A nurse is giving instruction to a client who is receiving cholestyramine (Questran) for the treatment of hyperlipidemia. Which of the following statements made by the client indicates the need for further instructions?**

- A. "This medication comes in a powder that must be mixed with juice or water before administration".
- B. "I will avoid eating foods rich in saturated fats".
- C. "I will take my Vitamin A 30 minutes after cholestyramine".
- D. "Constipation, belching and heartburn are some of the side effects".

**Correct Answer: C. "I will take my Vitamin A 30 minutes after cholestyramine".**

Cholestyramine (Questran) affects the fat digestion of vitamins such as Vitamin A, D, E, and K, therefore, decreasing its absorption. It is advised that other oral medications should be taken 1 hour before or 4 to 6 hours after taking cholestyramine.

- **Options A, B, & D:** These are correct statements regarding the medication.

**76. Nurse Trinity administered neutral protamine Hagedorn (NPH) insulin to a diabetic client at 7 a.m. At what time would the nurse expect the client to be most at risk for a hypoglycemic reaction?**

- A. 10:00 am
- B. Noon
- C. 4:00 pm
- D. 10:00 pm

**Correct Answer: C. 4:00 pm**

NPH is an intermediate-acting insulin that peaks 8 to 12 hours after administration. Because the nurse administered NPH insulin at 7 a.m., the client is at greatest risk for hypoglycemia from 3 p.m. to 7 p.m.

- **Option A:** At 10:00 am, the insulin given would not have reached its peak.
- **Option B:** During noontime, risk for hypoglycemia would still be low.
- **Option D:** 10:00 pm is already a late time for the peak action of insulin.

**77. Nurse Pippy is reviewing a client's fluid intake and output record. Fluid intake and urine output should relate in which way?**

- A. Fluid intake should double the urine output.
- B. Fluid intake should be approximately equal to the urine output.
- C. Fluid intake should be half the urine output.
- D. Fluid intake should be inversely proportional to the urine output.

**Correct Answer: B. Fluid intake should be approximately equal to the urine output.**

Normally, fluid intake is approximately equal to the urine output. Any other relationship signals an abnormality. The core principle of fluid balance is that the amount of water lost from the body must equal the amount of water taken in; for example, in humans, the output (via respiration, perspiration, urination, defecation, and expectoration) must equal the input (via eating and drinking, or by parenteral intake).

- **Option A:** Fluid intake that is double the urine output indicates fluid retention. Fluid retention (edema) occurs when the fluid isn't removed from the tissues. The two broad categories of fluid retention include generalized edema, when swelling occurs throughout the body, and localized edema when particular parts of the body are affected.
- **Option C:** Fluid intake that is half the urine output indicates dehydration. Body water is lost through the skin, lungs, kidneys, and GI tract. The loss of body water without sodium causes dehydration. Water is lost from the skin, lungs, gastrointestinal tract, and kidneys. Dehydration results when water losses from the body exceed water replacement. It may be caused by failure to replace obligate water losses.
- **Option D:** Normally, fluid intake isn't inversely proportional to the urine output. One general principle for all patient scenarios is to replace whatever fluid is being lost as accurately as possible. These fluid losses can differ depending on patients' medical conditions and differ by both volume and composition.

**78. Which action by the nurse in charge is essential when cleaning the area around a Jackson-Pratt wound drain?**

- A. Cleaning from the center outward in a circular motion.
- B. Removing the drain before cleaning the skin.
- C. Cleaning briskly around the site with alcohol.
- D. Wearing sterile gloves and a mask.

**Correct Answer: A. Cleaning from the center outward in a circular motion.**

The nurse always should clean around a wound drain, moving from center outward in ever-larger circles, because the skin near the drain site is more contaminated than the site itself. A Jackson-Pratt (JP) drain is used to remove fluids that build up in an area of the body after surgery. The JP drain is a

bulb-shaped device connected to a tube. One end of the tube is placed inside the client during surgery. The other end comes out through a small cut in the skin. The bulb is connected to this end. The client may have a stitch to hold the tube in place.

- **Option B:** The nurse should never remove the drain before cleaning the skin. The JP drain removes fluids by creating suction in the tube. The bulb is squeezed flat and connected to the tube that sticks out of the body. The bulb expands as it fills with fluid.
- **Option C:** Alcohol should never be used to clean around a drain; it may irritate the skin and has no lasting effect on bacteria because it evaporates. Use soap and water or saline (salt water) solution to clean a JP drain site. Dip a cotton swab or gauze pad in the solution and gently clean the skin.
- **Option D:** The nurse should wear sterile gloves to prevent contamination, but a mask is not necessary. Wash hands with soap and water after discarding the gloves.

**79. The nurse is interacting with a family consisting of a mother, a father, and a hospitalized adolescent who has a diagnosis of alcohol abuse. The nurse analyzes the situation and agrees with the adolescent's view about family rules. Which intervention is most appropriate?**

- A. The nurse should align with the adolescent, who is the family scapegoat.
- B. The nurse should encourage the parents to adopt more realistic rules.
- C. The nurse should encourage the adolescent to comply with parental rules.
- D. The nurse should remain objective and encourage mutual negotiation of issues.

**Correct Answer: D. The nurse should remain objective and encourage mutual negotiation of issues.**

The nurse who wishes to be helpful to the entire family must remain neutral. Taking sides in a conflict situation in a family will not encourage negotiation, which is important for problem resolution. Nurses who choose collaboration as their conflict resolution strategy incorporate others' ideas into their own; while the result may not be as half-and-half as with the compromising method, the solution still has aspects of everyone's opinions and input, increasing group buy-in and general satisfaction with the final decision.

- **Option A:** If the nurse aligned with the adolescent, then the nurse would be blaming the parents for the child's current problem; this would not help the family's situation. Learning to negotiate conflict is a function of a healthy family.
- **Option B:** Instead of adopting a "me vs. you" mentality, nurses approaching interpersonal conflict resolution from a compromising mentality aim to reach a solution that makes both sides at least partially happy. By doing so, both sides leave with something they want and are able to move forward with implementing a solution.
- **Option C:** Encouraging the parents to adopt more realistic rules or the adolescent to comply with parental rules does not give the family an opportunity to try to resolve problems on their own. Nurses who choose to use obliging as their main conflict resolution strategy are people-pleasers. They're fine accommodating other ideas even at the expense of shelving or de-prioritizing their own. This can be helpful when it moves the best solution forward, but it can also be dangerous because it may lead to a case where an individual withholds valid convictions or opinions just to "keep the peace."

**80. Which statement represents the best rationale for using noninvasive and non-pharmacologic pain-control measures in conjunction with other measures?**

- A. These measures are more effective than analgesics.
- B. These measures decrease input to large fibers.
- C. These measures potentiate the effects of analgesics.
- D. These measures block transmission of type C fiber impulses.

**Correct Answer: C. These measures potentiate the effects of analgesics.**

Noninvasive measures may result in the release of endogenous molecular neuropeptides with analgesic properties. They potentiate the effect of analgesics. The role of non-pharmacological approaches to pain management is evolving, and some non-pharmacological and complementary therapies have an increasingly important contribution to make to holistic patient care alongside analgesics.

- **Option A:** No evidence indicates that noninvasive and nonpharmacologic measures are more effective than analgesics in relieving pain. Exercise, multidisciplinary rehabilitation, acupuncture, CBT, mindfulness practices, massage, and mind-body practices most consistently improve function and/or pain beyond the course of therapy for specific chronic pain conditions.
- **Option B:** Decreased input over large fibers allows more pain impulses to reach the central nervous system. When deciding the most effective non-pharmacological technique, take into consideration the patient's age, developmental level, medical history and prior experiences, the current degree of pain, and/or anticipated pain. The advantage of non-pharmacological treatments is that they are relatively inexpensive and safe.
- **Option D:** There is no connection between type C fiber impulses and noninvasive and nonpharmacologic pain-control measures. Non-pharmacological pain therapy refers to interventions that do not involve the use of medications to treat pain. The goals of non-pharmacological interventions are to decrease fear, distress, and anxiety, and reduce pain and provide patients with a sense of control.

**81. Which clinical manifestation would the nurse expect a client diagnosed with acute cholecystitis to exhibit?**

- A. Jaundice, dark urine, and steatorrhea
- B. Acute right lower quadrant (RLQ) pain, diarrhea, and dehydration
- C. Ecchymosis petechiae, and coffee-ground emesis
- D. Nausea, vomiting, and anorexia

**Correct Answer: D. Nausea, vomiting, and anorexia**

Acute cholecystitis is an acute inflammation of the gallbladder commonly manifested by the following: anorexia, nausea, and vomiting; biliary colic; tenderness and rigidity the right upper quadrant (RUQ) elicited on palpation (e.g., Murphy's sign); fever; fat intolerance; and signs and symptoms of jaundice.

- **Option A:** Jaundice, dark urine, and steatorrhea are clinical manifestations of the icteric phase of hepatitis. Patients in this phase present with dark-colored urine and pale-colored stool. Some patients develop jaundice and right upper quadrant pain with liver enlargement.

- **Option B:** Cases of chronic cholecystitis present with progressing right upper quadrant abdominal pain with bloating, food intolerances (especially greasy and spicy foods), increased gas, nausea, and vomiting. Pain in the mid back or shoulder may also occur.
- **Option C:** Ecchymosis, petechiae, and coffee-ground emesis are clinical manifestations of esophageal bleeding. The coffee-ground appearance indicates old bleeding. The clinical presentation can vary but should be well-characterized. Hematemesis is the overt bleeding with vomiting of fresh blood or clots. Melena refers to dark and tarry-appearing stools with a distinctive smell. The term “coffee-grounds” describes gastric aspirate or vomitus that contains dark specks of old blood.

**82. Kate, who has undergone mitral valve replacement, suddenly experiences continuous bleeding from the surgical incision during the postoperative period. Which of the following pharmaceutical agents should Nurse Aiza prepare to administer to Kate?**

- A. Protamine Sulfate
- B. Quinidine Sulfate
- C. Vitamin C
- D. Coumadin

**Correct Answer: A. Protamine Sulfate**

Protamine Sulfate is used to prevent continuous bleeding in a client who has undergone open heart surgery. Protamine is a medication used to reverse and neutralize the anticoagulant effects of heparin. Protamine is the specific antagonist that neutralizes heparin-induced anticoagulation. Protamine is a strongly alkaline (nearly two-thirds of the amino acid composition is arginine) polycationic low-molecular-weight protein found in salmon sperm that is also currently available in a recombinant form.

- **Option B:** Quinidine sulfate is used to treat or prevent many types of irregular heartbeats such as atrial fibrillation. Quinidine can greatly improve the ability to perform normal activities by decreasing the number of irregular heartbeats. However, it may not stop all irregular heartbeats completely. It works by blocking abnormal heartbeat signals.
- **Option C:** Vitamin C, or ascorbic acid, has several important functions: helping to protect cells and keeping them healthy, maintaining healthy skin, blood vessels, bones, and cartilage, and helping with wound healing.
- **Option D:** Coumadin is used to treat blood clots and/or prevent new clots from forming in the body. Preventing harmful blood clots helps to reduce the risk of a stroke or heart attack. Conditions that increase the risk of developing blood clots include a certain type of irregular heart rhythm (atrial fibrillation), heart valve replacement, recent heart attack, and certain surgeries (such as hip/knee replacement).

**83. Nurse Perry is aware that language development in autistic child resembles:**

- A. Scanning speech
- B. Speech lag
- C. Stuttering



D. Echolalia

**Correct Answer: D. Echolalia**

The autistic child repeats sounds or words spoken by others. Echolalia is a unique form of speech, and if the child has autism it may be one of the first ways in which the child uses speech to communicate. Thus, while it can be described as a symptom of autism, it can also be a great place for a parent or speech-language therapist to start working with the child.

- **Option A:** Scanning speech is a type of ataxic dysarthria in which spoken words are broken up into separate syllables, often separated by a noticeable pause, and spoken with varying force. Scanning speech, like other ataxic dysarthrias, is a symptom of lesions in the cerebellum. It is a typical symptom of multiple sclerosis, and it constitutes one of the three symptoms of Charcot's neurologic triad.
- **Option B:** Speech delay, also known as alalia, refers to a delay in the development or use of the mechanisms that produce speech. Speech – as distinct from language – is the actual process of making sounds, using such organs and structures as the lungs, vocal cords, mouth, tongue, teeth, etc. Language delay refers to a delay in the development or use of the knowledge of language.
- **Option C:** People who stutter may have more disfluencies and different types of disfluencies. They may repeat parts of words (repetitions), stretch a sound out for a long time (prolongations), or have a hard time getting a word out (blocks). Stuttering is more than just disfluencies. Stuttering also may include tension and negative feelings about talking. It may get in the way of how you talk to others. You may want to hide your stuttering. So, you may avoid certain words or situations. For example, you may not want to talk on the phone if that makes you stutter more.

**84. Which of the following medications decreases their action while taking thyroid hormone?**

- A. Metformin
- B. Warfarin
- C. Zoloft
- D. Epinephrine

**Correct Answer: A. Metformin**

Metformin, an oral hypoglycemic drug when taken with a thyroid hormone decreases their action.

- **Options B, C, & D:** Warfarin (an anticoagulant), Zoloft (an antidepressant), and Epinephrine (a sympathomimetic) increases their action when taken with a thyroid hormone.

**85. What are the advantages of using directional hypotheses? Select all that apply.**

- A. The indication of the use of a theory base to derive the hypothesis.
- B. The provision of a specific theoretical frame of reference.
- C. Ensurance that findings will be generalizable.
- D. The indication of a non-biased selection of subjects.

**Correct Answer: A, B**

A directional (or one-tailed hypothesis) states which way the researcher thinks the results are going to go, for example in an experimental study we might say..."Participants who have been deprived of sleep for 24 hours will have more cold symptoms in the following week after exposure to a virus than participants who have not been sleep deprived."

- **Option A:** A decent hypothesis will contain two variables, in the case of an experimental hypothesis there will be an IV and a DV; in a correlational hypothesis there will be two co-variables.
- **Option B:** A test of a nondirectional alternative hypothesis does not state the direction of the difference, it indicates only that a difference exists. In contrast, a directional alternative hypothesis specifies the direction of the tested relationship, stating that one variable is predicted to be larger or smaller than the null value.
- **Option C:** A directional hypothesis is a prediction made by a researcher regarding a positive or negative change, relationship, or difference between two variables of a population.
- **Option D:** A directional hypothesis is a one-tailed hypothesis that states the direction of the difference or relationship (e.g. boys are more helpful than girls).