Kevin's Review - 85 NCLEX Practice Questions

1. When teaching parents about typical toddler eating patterns, which of the following should be included?

A . Food “jags.”

B. Preference to eat alone

C. Consistent table manners

D. Increase in appetite

Correct Answer: A. Food “jags.”

Toddlers become picky eaters, experiencing food jags, and eating large amounts one day and very little the next. A toddler’s food gags express a preference for the ritualism of eating one type of food for several days at a time.

- **Option B:** Toddlers typically enjoy socialization and limiting others at mealtime.
- **Option C:** Toddlers prefer to feed themselves and thus are too young to have table manners.
- **Option D:** A toddler’s appetite and the need for calories, protein, and fluid decrease due to the dramatic slowing of growth rate.

2. A 58-year-old male patient, Mr. Smith, who has been diagnosed with moderate to severe rheumatoid arthritis (RA), presents to an outpatient rheumatology clinic. He complains of joint stiffness in the morning, especially in his hands and wrists, and expresses difficulty in performing daily tasks such as buttoning his shirt. On physical examination, there is notable swelling, tenderness, and warmth in the metacarpophalangeal and proximal interphalangeal joints. After discussing various therapeutic options, the rheumatologist prescribes methotrexate to Mr. Smith. As the nurse in charge of providing patient education, which information regarding methotrexate is essential for Mr. Smith to understand? Select all that apply.

A. The importance of regular blood tests to monitor liver function

B. The need to avoid alcohol while taking methotrexate

C. The potential for increased susceptibility to infections

D. The possibility of gastrointestinal side effects

E. The importance of taking methotrexate on an empty stomach

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

- **Option A:** Methotrexate can have an impact on liver function, and regular blood tests are essential to monitor for any signs of liver toxicity. The nurse should emphasize the significance of attending these tests as scheduled to ensure the safe and effective use of the medication.
- **Option B:** Methotrexate and alcohol do not mix well. Alcohol can increase the risk of liver damage when combined with methotrexate. Therefore, patients should be informed about the importance of abstaining from alcohol during their treatment.
- **Option C:** Methotrexate can suppress the immune system, making patients more susceptible to infections. Patients need to be aware of this potential risk and should promptly report any signs of

infection to their healthcare provider.

- **Option D:** Gastrointestinal side effects, such as nausea, vomiting, and diarrhea, are common with methotrexate. The nurse should inform the patient about these potential side effects and provide strategies to manage them, such as taking the medication with food or using anti-nausea medications if necessary.
- **Option E:** Methotrexate is typically taken with food to reduce the risk of gastrointestinal side effects. Taking it on an empty stomach can increase the likelihood of nausea and discomfort. Therefore, the nurse should advise the patient to take methotrexate with a meal or snack, unless otherwise directed by the prescribing physician.

3. Which of the following information must be included for the family of a client diagnosed with a dependent personality disorder?

A. Promote exercise programs

B. Explore panic attacks

C. Address coping skills

D. Decrease aggressive outbursts

Correct Answer: C. Address coping skills.

The family needs information about coping skills to help the client learn to handle stress. When the client is ready and interested, teach the client coping skills to help defuse tension and trouble feelings (e.g., anxiety reduction, assertiveness skills). Increasing skills help the client use healthier ways to defuse tensions and get needs met.

- **Option A:** Exercise is a health promotion activity for all clients. Clients with a dependent personality disorder wouldn't need exercise promoted more than other people. Clients may benefit from coping skills training (e.g., anger management skills, emotional regulation skills, interpersonal skills). Provide referrals and/or involve professional experts.
- **Option B:** They don't tend to have panic attacks. Identify behavioral limits and behaviors that are expected. Client needs a clear structure. Expect frequent testing of limits initially. Maintaining limits can enhance feelings of safety in the client. Identify what the client sees as the behaviors and circumstances that lead to the hospitalization. Ascertain client's understanding of behaviors and responsibility for own actions.
- **Option D:** Clients with a dependent personality disorder don't have aggressive outbursts; they tend to be passive and submit to others. When appropriate, try to understand underlying feelings prompting inappropriate behaviors. Often acting out behaviors stem from underlying feelings of anger, fear, shame, insecurity, loneliness, etc. Talking about feelings can lead to problem-solving and growth for the client.

4. A nurse implements a teaching plan for a pregnant client who is newly diagnosed with gestational diabetes. Which statement if made by the client indicates a need for further education?

A. "I need to stay on the diabetic diet."

B. "I will perform glucose monitoring at home."

C. "I need to avoid exercise because of the negative effects of insulin production."

D. “I need to be aware of any infections and report signs of infection immediately to my health care provider.”

Correct Answer: C. “I need to avoid exercise because of the negative effects of insulin production.”

Exercise is safe for the client with gestational diabetes and is helpful in lowering the blood glucose level.

- **Option A:** The goal of dietary therapy is to avoid single large meals and foods with a large percentage of simple carbohydrates. The diet should include foods with complex carbohydrates and cellulose, such as whole-grain breads and legumes.
- **Option B:** The best method for screening for gestational diabetes continues to be controversial. The 2-step system is currently recommended in the United States. A 50-g, 1-hour glucose challenge test (GCT) is followed by a 100-g, 3-hour OGTT for those with an abnormal screening result. Alternatively, for high-risk women, or in areas in which the prevalence of insulin resistance is 5% or higher (eg, the southwestern and southeastern United States), a 1-step approach can be used by proceeding directly to the 100-g, 3-hour OGTT.
- **Option D:** Pregnant women with gestational diabetes mellitus (GDM) are reported to be at increased risk for infections of the genital tract. Bacterial vaginosis (BV) is known to be a crucial factor for preterm delivery (PTD), causing up to 40 percent of premature births.

5. A 25 –year old client experiencing alcohol withdrawal is upset about going through detoxification. Which of the following goals is a priority?

A. The client will commit to a drug-free lifestyle.

B. The client will work with the nurse to remain safe.

C. The client will drink plenty of fluids daily.

D. The client will make a personal inventory of strength.

Correct Answer: B. The client will work with the nurse to remain safe.

The priority goal in alcohol withdrawal is maintaining the client’s safety. Alcohol withdrawal can range from very mild symptoms to the severe form, which is named delirium tremens. The hallmark is autonomic dysfunction resulting from the excitation of the central nervous system. Mild signs/symptoms can arise within six hours of alcohol cessation. If symptoms do not progress to more severe symptoms within 24 to 48 hours, the patient will likely recover.

- **Option A:** Delirium tremens is the most severe form of alcohol withdrawal, and its hallmark is that of an altered sensorium with significant autonomic dysfunction and vital sign abnormalities. It includes visual hallucinations, tachycardia, hypertension, hyperthermia, agitation, and diaphoresis. Symptoms of delirium tremens can last up to seven days after alcohol cessation and may last even longer.
- **Option C:** The diagnosis of alcohol withdrawal can be made by taking an excellent history and performing a thorough physical examination. It is a clinical diagnosis based on mild, moderate, or severe symptoms. Patients with suspicion for alcohol withdrawal should be evaluated for other underlying disease processes such as dehydration, infection, cardiac issues, electrolyte abnormalities, gastrointestinal bleeding, and traumatic injury. Laboratory studies (electrolytes, blood counts) may be drawn, but will likely be nondiagnostic.

- **Option D:** Patients with prolonged altered sensorium or significant renal abnormalities should have an evaluation for the potential ingestion of another toxic alcohol. Patients who become financially strapped due to alcoholism could ingest other alcohols to become intoxicated. These can include isopropyl alcohol, commonly known as rubbing alcohol, which can lead to acidemia without ketosis as well as hemorrhagic gastritis.

6. A 15-year-old male client was sent to the emergency unit following a small laceration on the forehead. The client says that he can't move his legs. Upon assessment, respiratory rate of 20, strong pulses, and capillary refill time of less than 2 seconds. Which triage category would this client be assigned to?

A. Red

B. Black

C. Yellow

D. Green

E. White

Correct Answer: C. Yellow

The client is possibly suffering from a spinal injury but otherwise, has a stable status and can communicate so the appropriate tag is yellow. If individuals can breathe spontaneously, follow simple commands, and have distal pulses with a normal capillary refill, they are tagged delayed and given the code yellow.

- **Option A:** Red tags are for people with life-threatening conditions who need immediate emergency treatment. The rest of the individuals who have poor respirations or cannot protect their airway, have absent or decreased peripheral pulses, and are unable to follow simple commands are tagged immediately and given the color red.
- **Option B:** Black tags are for deceased people and for those who are not expected to survive due to extensive injuries. Once the "minor" injuries are out of the area, responders should begin to move and triage patients with the RPM acronym; respirations, perfusion, and mental status. This includes making sure the individual has a manual respiration rate that is roughly greater than 30 breaths a minute, peripheral pulses are present with a capillary refill of fewer than 2 seconds, and can follow commands. If a patient has none of these, the patient is declared deceased, given a black tag, and moved to the black-coded area.
- **Option D:** Green tags are for those people with non-urgent cases and can wait for their turn for assessment and treatment. Anyone who can follow these commands and walk to this area is designated as "minor" and given a green tag to signify minor injury status.
- **Option E:** White tags are for those with minor injuries that don't require any medical care. With this method, providers can quickly rule in and rule out individuals who require immediate medical attention, who can wait, and who nothing can be done for.

7. When providing discharge teaching for a client with uric acid calculi, the nurse should make an instruction to avoid which type of diet?

A. Low-calcium

B. Low-oxalate

C. High-oxalate

D. High-purine

Correct Answer: D. High-purine

To control uric acid calculi, the client should follow a low-purine diet, which excludes high-purine foods such as organ meats. To prevent uric acid stones, cut down on high-purine foods such as red meat, organ meats, and shellfish, and follow a healthy diet that contains mostly vegetables and fruits, whole grains, and low-fat dairy products.

- **Option A:** A low-calcium diet decreases the risk for oxalate renal calculi. Limit sugar-sweetened foods and drinks, especially those that contain high fructose corn syrup. Limit alcohol because it can increase uric acid levels in the blood and avoid crash diets for the same reason.
- **Option B:** A low-oxalate diet is used to control calcium or oxalate calculi. Eating less animal-based protein and eating more fruits and vegetables will help decrease urine acidity and this will help reduce the chance for stone formation.
- **Option C:** Oxalate is a compound that is naturally found in most foods such as fruits, vegetables, nuts, grains, and seeds. It must be included in the diet. In addition to calcium oxalate stones, another common type of kidney stone is uric acid stones. Red meat, organ meats, and shellfish have high concentrations of a natural chemical compound known as purines.

8. The nurse caring for a client in the neonatal intensive care unit administers adult-strength Digitalis to the 3-pound infant. As a result of her actions, the baby suffers permanent heart and brain damage. The nurse can be charged with:

A. Negligence

B. Tort

C. Assault

D. Malpractice

Correct Answer: D. Malpractice

The nurse could be charged with malpractice, which is failing to perform, or performing an act that causes harm to the client. Giving the infant an overdose falls into this category. In the United States, a patient may allege medical malpractice against a clinician, which is typically defined by the failure the provide the degree of care another clinician in the same position with the same credentials would have performed that resulted in injury to the patient.

- **Option A:** Negligence is failing to perform care for the client. a tort is a wrongful act committed. Negligence, in law, the failure to meet a standard of behaviour established to protect society against unreasonable risk. Negligence is the cornerstone of tort liability and a key factor in most personal injury and property-damage trials.
- **Option B:** A tort is a wrongful act committed on the client or their belongings. 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.

- **Option C:** Assault is a violent physical or verbal attack. Assault is the intentional act of making someone fear that you will cause them harm. You do not have to actually harm them to commit assault. Threatening them verbally or pretending to hit them are both examples of assault that can occur in a nursing home.

9. Mina, who is suspected of an ovarian tumor is scheduled for a pelvic ultrasound. The nurse provides which pre-procedure instruction to the client?

A. Wear comfortable clothing and shoes for the procedure

B. Maintain an NPO status before the procedure

C. Drink six to eight glasses of water without voiding before the test

D. Eat a light breakfast only

Correct Answer: C. Drink six to eight glasses of water without voiding before the test

- **Option C:** A pelvic ultrasound requires the ingestion of large volumes of water just before the procedure. A full bladder is necessary so that it will be visualized as such and not mistaken for possible pelvic growth.
- **Option A:** Comfortable shoes and clothing is unrelated to this specific procedure.
- **Option B:** An abdominal ultrasound may require that the client abstain from food or fluid for several hours before the procedure.
- **Option D:** A patient may eat and drink on the day of the exam regardless of quantity.

10. An intoxicated client comes into the emergency unit with uncooperative behavior, mild confusion, and slurred speech. The client is unable to provide a good history but he verbalizes that he has been drinking a lot. Which of the following is a priority action of the nurse?

A. Administer IV fluid incorporated with Vitamin B1 as ordered

B. Administer Naloxone (Narcan) 4 mg as ordered

C. Contact the family to get information about the client

D. Obtain an order for the determination of blood alcohol level

Correct Answer: A. Administer IV fluid incorporated with Vitamin B1 as ordered.

The client has symptoms of alcohol abuse and there is a risk for Wernicke syndrome, which is caused by a deficiency in Vitamin B. Thiamine deficiency (vitamin B1) is common in patients with alcohol dependence. Cognitive impairments may be an early consequence of thiamine deficiency. Wernicke's encephalopathy is underdiagnosed and undertreated.

- **Option B:** Multiple drug abuse is not uncommon; however, there is currently nothing to suggest an opiate overdose that requires the administration of naloxone. Naloxone is indicated for the treatment of opioid toxicity, specifically to reverse respiratory depression from opioid use. It is useful in accidental or intentional overdose and acute or chronic toxicity.
- **Option C:** Teens and young adults are at higher risk for binge drinking, which can cause alcohol poisoning. Binge drinking is a pattern of drinking that raises the blood alcohol level within a short period of time. Though it varies from person to person, binge drinking is usually defined as four

drinks for women and five drinks for men in a two-hour period.

- **Option D:** Additional information or the results of the blood alcohol testing are part of the management but should not delay the immediate treatment. A blood alcohol test may be used to find out if the patient has alcohol poisoning, a life-threatening condition that happens when the blood alcohol level gets very high. Alcohol poisoning can seriously affect basic body functions, including breathing, heart rate, and temperature.

11. When administering sucralfate (Carafate) to a patient with a nasogastric tube, it is important to:

A. Crush the tablet into a fine powder before mixing with water.

B. Administer with a bolus tube feeding.

C. Allow the tablet to dissolve in water before administering.

D. Administer with an antacid for maximum benefit.

Correct Answer: C. Allow the tablet to dissolve in water before administering.

It is important to give sucralfate on an empty stomach so that it may dissolve and form a protective barrier over the gastric mucosa. Sucralfate exhibits its action by forming a protective layer, increasing bicarbonate production, exhibiting anti-peptic effects, promoting tissue growth, regeneration, and repair.

- **Option A:** The tablet form will not dissolve in water when crushed; it must be left whole and allowed to dissolve. Crushing the medication so that it will not dissolve could lead to clogging of the nasogastric tube and decreased effectiveness of the drug.
- **Option B:** Sucralfate is a basic aluminum salt of sucrose octasulfate. When given orally, it disintegrates in the stomach in the presence of acid and binds to normal and damaged mucosa forming a protective layer. It releases aluminum and binds to positively charged compounds like proteins, peptides, glycoproteins, and glyco lipoproteins, forming an adhesive layer, thereby protecting the mucosa.
- **Option D:** It prevents hydrolysis by preventing the formation of the enzyme-substrate complex. It adsorbs to pepsin and decreases its concentration. By forming a polyanion gel, it acts as a physical barrier between luminal contents and mucosa. It increases prostaglandin-dependent and independent production of bicarbonate by stomach and duodenum.

12. A 27-year old client, who became paraplegic after a swimming accident, is experiencing autonomic dysreflexia. Which condition is the most common cause of autonomic dysreflexia?

A. Upper respiratory infection

B. Incontinence

C. Bladder distention

D. Diarrhea

Correct Answer: C. Bladder distention

Autonomic dysreflexia is a potentially life-threatening complication of spinal cord injury, occurring from obstruction of the urinary system or bowel. In about 85% of cases, this stimulus is from a urological source such as a UTI, a distended bladder, or a clogged Foley catheter. The etiology is a spinal cord injury, usually above the T6 level. It is unlikely to occur if the level is below T10. The higher the injury level, the greater the severity of the cardiovascular dysfunction.

- **Option A:** An URI could obstruct the respiratory system, but not the urinary or bowel system. The severity and frequency of autonomic dysreflexia episodes are also associated with the completeness of the spinal cord injury. Patients usually develop autonomic dysreflexia one month to one year after their injury. However, it has also been described in the first days or weeks after the original trauma.
- **Option B:** The most common stimuli are distention of a hollow viscus, such as the bladder or rectum. Pressure ulcers or other injuries such as fractures and urinary tract infections are also common causes. Sexual intercourse can also be a stimulus.
- **Option D:** Incontinence and diarrhea don't result in obstruction of the urinary system or bowel, respectively. In an intact autonomic system, this increased blood pressure stimulates the carotid sinus leading to a parasympathetic outflow slowing the heart rate via vagal stimulation and causing diffuse vasodilation to balance the original increased sympathetic response. However, in the setting of a spinal cord injury, the normal compensatory parasympathetic response cannot travel below the level of the spinal cord injury, and generalized vasoconstriction continues below the level of injury leading to systemic hypertension.

13. A child has been diagnosed with meningococcal meningitis. Which of the following isolation techniques is appropriate? Select all that apply.

A. Enteric precautions

B. Neutropenic precautions

C. No precautions are required as long as antibiotics have been started.

D. Isolation precautions for at least 24 hours after the initiation of antibiotics

E. Droplet precautions (private room, mask for all entering the room) until they have completed 24 hours of appropriate antibiotic therapy

F. Negative pressure ventilation is not required.

Correct Answer: D, E, & F.

Meningococcal meningitis is the term used to describe a bacterial form of meningitis caused by Neisseria meningitidis. This form of meningitis is associated with high morbidity and mortality. Meningococcal meningitis is a medical emergency for which symptoms can range from transient fever to fulminant bacteremia and septic shock.

- **Option A:** Enteric precautions are taken to prevent infections that are transmitted primarily by direct or indirect contact with fecal material. They're indicated for patients with known or suspected infectious diarrhea or gastroenteritis. Clostridium difficile is the most common cause of hospital-acquired infectious diarrhea.
- **Option B:** Neutropenic precautions are steps to take to prevent infections if there is moderate to severe neutropenia. Neutropenia is a condition that causes low neutrophils in the blood.
- **Option C:** Patients with pneumococcal or viral meningitis do not require isolation. Viruses can penetrate the central nervous system (CNS) via retrograde transmission along neuronal pathways or by hematogenous seeding.

- **Option D:** Isolation is begun and maintained for at least 24 hours after antibiotics are given. On initial encounter when the patient presents with an undifferentiated acute bacterial meningitis, administration of broad-spectrum antibiotics is appropriate pending bacterial isolation. Seven days course of antibiotic therapy is usually sufficient to treat suspected cases of meningococcal meningitis.
- **Option E:** Meningococcal meningitis is transmitted primarily by droplet infection. The patient with suspected or confirmed N. meningitidis should follow droplet precaution. This should be continued until after 24 hours of effective antibiotics administration.
- **Option F:** Negative pressure ventilation is not required. Droplet Precautions are intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions as described. Because these pathogens do not remain infectious over long distances in a healthcare facility, special air handling and ventilation are not required to prevent droplet transmission.

14. A postpartum patient was in labor for 30 hours and had ruptured membranes for 24 hours. For which of the following would the nurse be alert?

A. Endometritis

B. Endometriosis

C. Salpingitis

D. Pelvic thrombophlebitis

Correct Answer: A. Endometritis

Endometritis is an infection of the uterine lining and can occur after prolonged rupture of membranes. Symptoms include swelling of the abdomen, abnormal vaginal bleeding or discharge, fever, discomfort with bowel movement, and pain in the lower abdomen or pelvic region.

- **Option B:** Endometriosis does not occur after a strong labor and prolonged rupture of membranes. It is a painful disorder in which tissue similar to the tissue that normally lines the inside of the uterus grows outside of the uterus.
- **Option C:** Salpingitis is a tubal infection and could occur if endometritis is not treated. It is an inflammation of the fallopian tubes caused by bacterial infection.
- **Option D:** Pelvic thrombophlebitis involves a clot formation, but it is not a complication of prolonged rupture of membranes. It is an extremely rare condition that occurs after delivery when an infected blood clot, or thrombus, causes inflammation in the pelvic vein.

15. A 26-year-old client is admitted to the psychiatric unit with acute onset of schizophrenia. His physician prescribes the phenothiazine chlorpromazine (Thorazine), 100 mg by mouth four times per day. Before administering the drug, the nurse reviews the client's medication history. Concomitant use of which drug is likely to increase the risk of extrapyramidal effects?

A. guanethidine (Ismelin)

B. droperidol (Inapsine)

C. lithium carbonate (Lithonate)

D. Alcohol

Correct Answer: B. droperidol (Inapsine)

When administered with any phenothiazine, droperidol may increase the risk of extrapyramidal effects. Despite being a low-potency drug, chlorpromazine can still cause extrapyramidal side effects (EPS) such as acute dystonia, akathisia, parkinsonism, and tardive dyskinesia (TD). The evolution of EPS side effects can occur through hours to days. Acute dystonia refers to muscle stiffness or spasm of the head, neck, and eye muscles that can start hours after starting the medication. Akathisia includes restlessness and fast pacing. Parkinsonism includes bradykinesia, “cogwheel” rigidity, and shuffling gait.

- **Option A:** An antihypertensive agent that acts by inhibiting selectively transmission in postganglionic adrenergic nerves. It is believed to act mainly by preventing the release of norepinephrine at nerve endings and causes depletion of norepinephrine in peripheral sympathetic nerve terminals as well as in tissues.
- **Option C:** Lithium was the first mood stabilizer and is still the first-line treatment option, but is underutilized because it is an older drug. Lithium is a commonly prescribed drug for a manic episode in bipolar disorder as well as maintenance therapy of bipolar disorder in a patient with a history of a manic episode. The primary target symptoms of lithium are mania and unstable mood.
- **Option D:** Taking these products too close together may make this medicine less effective. This medicine will add to the effects of alcohol and other central nervous system (CNS) depressants (medicines that slow down the nervous system, possibly causing drowsiness).

16. When developing a nursing care plan for a client with a fractured right tibia, the nurse includes in the plan of care independent nursing interventions, including:

A. Apply a cold pack to the tibia.

B. Elevate the leg 5 inches above the heart.

C. Perform a range of motion to right leg every 4 hours.

D. Administer aspirin 325 mg every 4 hours as needed.

Correct Answer: B. Elevate the leg 5 inches above the heart.

This does not require a physician’s order. Independent nursing interventions are activities that nurses are licensed to initiate based on their sound judgment and skills. Includes ongoing assessment, emotional support, providing comfort, teaching, physical care, and making referrals to other health care professionals.

- **Option A:** This intervention requires a doctor’s order. Assessment and providing explanation while administering medical orders are also part of the dependent nursing interventions.
- **Option C:** C is not appropriate for a fractured tibia. Isometrics contract muscles without bending joints or moving limbs and help maintain muscle strength and mass. Note: These exercises are contraindicated while acute bleeding and edema are present.
- **Option D:** Dependent nursing interventions are activities carried out under the physician’s orders or supervision. Includes orders to direct the nurse to provide medications, intravenous therapy, diagnostic tests, treatments, diet, and activity or rest.

17. A child is admitted to the hospital with a diagnosis of Wilms tumor, stage II. Which of the following statements most accurately describes this stage?

A. The tumor is less than 3 cm. in size and requires no chemotherapy.

B. The tumor did not extend beyond the kidney and was completely resected.

C. The tumor extended beyond the kidney but was completely resected.

D. The tumor has spread into the abdominal cavity and cannot be resected.

Correct Answer: C. The tumor extended beyond the kidney but was completely resected.

Stage II, the tumor extends beyond the kidney but is completely resected. Stage II would be a tumor that has grown outside the kidney to some degree, such as into surrounding fatty tissue. Usually, the tumor would be completely removable by surgery, and regional lymph nodes are negative. About 20% of all Wilms tumors are at this stage.

- **Option A:** This is not included in the staging of Wilms tumor. Imaging is particularly important in surgical planning. Surgical risk factors include larger tumor size, contralateral tumor extension, and displacement of the great vessels which typically result in longer surgical times, increased blood loss, and higher complication rates.
- **Option B:** This described stage I: the tumor is limited to the kidney and completely resected. Stage I indicates the tumor was completely contained within the kidney without any breaks or spillage outside the renal capsule and no vascular invasion. This stage accounts for 40% to 45% of all Wilms tumors.
- **Option D:** This described stage IV, hematogenous metastasis has occurred with spread beyond the abdomen. Stage IV tumors are those that have spread through the vascular system to distant organs such as the lungs, liver, brain, or bones, or to distant lymph nodes. These account for about 10% of all Wilms tumors.

18. In the post-surgical unit, the nurse is attending to a client who had a total hip replacement seven (7) days ago. This client has a history of hypertension, mild asthma, and is on anticoagulant therapy. The client provides feedback about their current condition. Which of the following statements by the client is most concerning and necessitates the nurse's immediate intervention?

A. "I have bad muscle spasms in my lower leg of the affected extremity."

B. "I just can't 'catch my breath' over the past few minutes and I think I am in grave danger."

C. "I have to use the bedpan to pass my water at least every 1 to 2 hours. It's tiring."

D. "It seems that the pain medication is not working as well today. I'm scared."

Correct Answer: B. "I just can't 'catch my breath' over the past few minutes, and I think I am in grave danger."

The nurse would be concerned about all of these comments, however, the most life-threatening is **Option B**. Clients who had hip or knee surgery are at higher risk for the development of postoperative pulmonary embolism. Sudden dyspnea and tachycardia are classic findings of pulmonary embolism. Without prophylaxis (e.g., anticoagulation medications), deep vein thrombosis can develop within 7 to 14 days following the surgery and can lead to pulmonary embolism. The nurse should be aware of the other signs of DVT which include pain and tenderness at or below the area of the clot, skin

discoloration, swelling, or tightness of the affected leg. Signs of pulmonary embolism include acute onset of dyspnea, tachycardia, confusion, and pleuritic chest pain.

- **Option A:** Muscle spasms occur after total hip replacements and acute pain is expected after a surgical procedure.
- **Option C:** This may indicate a urinary infection and needs further assessment by the nurse.
- **Option D:** This may require a reevaluation of pain and interventions to manage pain, though it does not need immediate action.

19. The nurse is caring for a client admitted with spinal cord injury. The nurse minimizes the risk of compounding the injury most effectively by:

A. Keeping the client on a stretcher.

B. Logrolling the client on a firm mattress.

C. Logrolling the client on a soft mattress.

D. Placing the client on a Stryker frame.

Correct Answer: D. Placing the client on a Stryker frame.

Spinal immobilization is necessary after spinal cord injury to prevent further damage and insult to the spinal cord. Whenever possible, the client is placed on a Stryker frame, which allows the nurse to turn the client to prevent complications of immobility, while maintaining alignment of the spine. If a Stryker frame is not available, a firm mattress with a bed board should be used.

- **Option A:** Where applicable, manual support of the head and neck should be maintained during any flat surface transfers as an additional safeguard – even if a cervical collar is in situ. If cervical traction is in place, the traction cord should be shortened to maintain the pull of the traction weights during transportation. Alternatively, the traction cord may be tied off to the end of the scoop stretcher or spinal board.
- **Option B:** Spinal cord injuries are serious. They can require a lengthy recovery period and put a person in bed for extended periods of time. Finding the best mattress and bed for spinal cord injury recovery and long-term support depends on the injury.
- **Option C:** Emergency Department staff prefer wherever possible not to have trauma patients arriving on vacuum mattresses directly from the scene of an accident as removal requires additional logrolling of a patient in pain and with unknown injuries. In addition, the vacuum mattress is not suitable to use as a splint for patients with acute pelvic fractures unless they have other means of pelvic splinting in situ. If the fracture is unstable the patient may continue to “bleed out” on releasing the mattress and collapse.

20. A male client with a solar burn of the chest, back, face, and arms is seen in urgent care. The nurse’s primary concern should be:

A. Fluid resuscitation

B. Infection

C. Body image

D. Pain management

Correct Answer: D. Pain management

With a superficial partial-thickness burn such as a solar burn (sunburn), the nurse's main concern is pain management. Pain is nearly always present to some degree because of the varying severity of tissue involvement and destruction but is usually most severe during dressing changes and debridement. Changes in location, character, intensity of pain may indicate developing complications (limb ischemia) or herald improvement and/or return of nerve function and sensation.

- **Option A:** Fluid resuscitation becomes a concern if the burn extends to the dermal and subcutaneous skin layers. Fluid resuscitation replaces lost fluids and electrolytes and helps prevent complications (shock, acute tubular necrosis). Replacement formulas vary but are based on the extent of injury, amount of urinary output, and weight. Note: Once initial fluid resuscitation has been accomplished, a steady rate of fluid administration is preferred to boluses, which may increase interstitial fluid shifts and cardiopulmonary congestion.
- **Option B:** Infection becomes a concern if the burn extends to the dermal and subcutaneous skin layers. Dependent on the type or extent of wounds and the choice of wound treatment (open versus closed), isolation may range from a simple wound and/or skin to complete or reverse to reduce risk of cross-contamination and exposure to multiple bacterial flora.
- **Option C:** Body image disturbance is a concern that has lower priority than pain management. Traumatic episodes result in sudden, unanticipated changes, creating feelings of grief over actual or perceived losses. This necessitates support to work through to optimal resolution.

21. Which of the following findings would be a source of concern if noted during the assessment of a woman who is 12 hours postpartum?

A. Postural hypotension

B. Temperature of 100.4°F

C. Bradycardia — pulse rate of 55 BPM

D. Pain in left calf with dorsiflexion of the left foot

Correct Answer: D. Pain in left calf with dorsiflexion of the left foot.

Pain in the left calf with dorsiflexion of the left foot indicates a positive Homan sign and is suggestive of thrombophlebitis and should be investigated further. The risk of developing blood clots (thrombophlebitis) is increased for about 6 to 8 weeks after delivery . Typically, blood clots occur in the deep veins of the legs or pelvis (a disorder called deep vein thrombosis). Sometimes one of these clots breaks loose and travels through the bloodstream into the lungs, where it lodges in a blood vessel in the lung, blocking blood flow. This blockage is called pulmonary embolism. Blood clots may also develop in the veins just under the skin in the legs. This disorder is called superficial venous thrombosis (superficial thrombophlebitis).

- **Option A:** The postpartum period is the period after delivery of conceptus when maternal physiological and anatomical changes return to the nonpregnant state. The blood pressure could be elevated due to pain or excitement but is generally in the normal range. A significant decrease (> 20% below baseline) in blood pressure could be a sign of postpartum hemorrhage or septic shock. Conversely, high blood pressure could be a sign of pain or pre-eclampsia.
- **Option B:** A temperature of 100.4°F in the first 24 hours is most likely indicative of dehydration which is easily corrected by increasing oral fluid intake. The temperature is slightly elevated up to 37.2C (99F) along with increased shivering, sweating, or diaphoresis in the first 24 hours and normalizes within 12 hours. The temperature rise is attributable to the systemic absorption of metabolites accumulated due to muscle contractions. There could be a transient temperature rise

(by 0.5C) on the third or fourth day due to breast engorgement.

- **Option C:** Bradycardia is expected to be related to circulatory changes after birth. There is generalized physical fatigue immediately after delivery. The pulse rate may be elevated a few hours after childbirth due to excitement or pain and usually normalizes on the second day. The postpartum period, also known as puerperium, starts following the expulsion of the placenta until complete physiological recovery of various organ systems. The postpartum period divides into three arbitrary phases, i.e., acute phase – the first 24 hours after delivery of the placenta, early – up to 7 days, and late – up to 6 weeks to 6 months. Each phase has its unique clinical considerations and challenges.

22. A client is diagnosed with prostate cancer. Which test is used to monitor the progression of this disease?

A. Serum creatinine

B. Complete blood cell count (CBC)

C. Prostate-specific antigen (PSA)

D. Serum potassium

Correct Answer: C. Prostate-specific antigen (PSA)

The PSA test is used to monitor prostate cancer progression; higher PSA levels indicate a greater tumor burden. Elevated Prostate-Specific Antigen (PSA) levels (usually greater than 4 ng/ml) in the blood is how 80% of prostate cancers initially present even though elevated PSA levels alone correctly identify prostate cancer only about 25% to 30% of the time. We recommend at least 2 abnormal PSA levels or the presence of a palpable nodule on DRE to justify a biopsy and further investigation.

- **Option A:** Serum creatinine levels may suggest blockage from an enlarged prostate. The percentage of free PSA in the blood can be a useful indicator of malignancy. If the total PSA is between 4 and 10 ng/ml, a free PSA percentage is considered valid. The free PSA percentage is calculated by multiplying the free PSA level by 100 and dividing by the total PSA value.
- **Option B:** CBC is used to diagnose anemia and polycythemia. Prostate Cancer Antigen 3 (PCA3) is an RNA-based genetic test performed from a urine sample obtained immediately after a prostate massage. PCA3 is a long, non-coding RNA molecule that is overexpressed exclusively in prostatic malignancies. It is upregulated 66 fold in prostate cancers. If PCA3 is elevated, it suggests the presence of prostate cancer.
- **Option D:** Serum potassium levels identify hypokalemia and hyperkalemia. PCA3 is best used to determine the need for a repeat biopsy after initial negative histology. Serial PCA3 testing may also be helpful in monitoring patients with low-grade prostate cancers on active surveillance.

23. Genevieve only attends social events when a family member is also present. She exhibits behavior typical of which anxiety disorder?

A. Agoraphobia

B. Generalized anxiety disorder

C. Obsessive-compulsive disorder

D. Post-traumatic stress disorder

Correct Answer: A. Agoraphobia

Agoraphobia is a disorder characterized by avoidance of situations in which escape may not be possible or help may be unavailable. 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.

- **Option B:** Generalized anxiety disorder is one of the most common mental disorders. Up to 20% of adults are affected by anxiety disorders each year. Generalized anxiety disorder produces fear, worry, and a constant feeling of being overwhelmed. Generalized anxiety disorder is characterized by persistent, excessive, and unrealistic worry about everyday things. This worry could be multifocal such as finance, family, health, and the future. It is excessive, difficult to control, and is often accompanied by many non-specific psychological and physical symptoms. Excessive worry is the central feature of generalized anxiety disorder.
- **Option C:** Obsessive-compulsive disorder (OCD) is often a disabling condition consisting of bothersome intrusive thoughts that elicit a feeling of discomfort. To reduce the anxiety and distress associated with these thoughts, the patient may employ compulsions or rituals. These rituals may be personal and private, or they may involve others to participate; the rituals are to compensate for the ego-dystonic feelings of the obsessional thoughts and can cause a significant decline in function.
- **Option D:** Posttraumatic stress disorder (PTSD) is a syndrome that results from exposure to real or threatened death, serious injury, or sexual assault. Following the traumatic event, PTSD is common and is one of the serious health concerns that is associated with comorbidity, functional impairment, and increased mortality with suicidal ideations and attempts. The Diagnostic and Statistical Manual of Mental Disorders(DSM-5) has included PTSD in the new category of Trauma- and Stress-related Disorders.

24. A client in a long-term care facility complains of pain. The nurse collects data about the client's pain. The first step in pain assessment is for the nurse to

A. Have the client identify coping methods.

B. Get the description of the location and intensity of the pain.

C. Accept the client's report of pain.

D. Determine the client's status of pain.

Correct Answer: C. Accept the client's report of pain.

Although all of the options above are correct, the first and most important piece of information in this client's pain assessment is what the client is telling you about the pain –"the client's report." Pain is the most common complaint seen in a primary care office. There are over 50 million Americans, 20 percent of all patients, that suffer from chronic pain in the United States.

- **Option A:** Effective treatment modalities for acute, chronic, centralized, or neuropathic are often different. Ten percent of the United States population complain of neuropathic pain. This population may benefit from a serotonin-norepinephrine reuptake inhibitor (SNRI) such as duloxetine, as compared to ibuprofen for an acute injury.
- **Option B:** To fully assess the location of a patient's pain, a body diagram map can be completed. Ankle sprains are solitary, acute injuries. Body diagrams may not be necessary in such a case. Localized pain is different from whole-body pain. Yet, in a patient with multiple comorbid pain disorders such as fibromyalgia, centralized pain disorder, and rheumatoid arthritis, distinguishing

between the numerous locations of a patient's pain, as well as factoring in the radiation of their pain, is difficult.

- **Option D:** An essential first step in the pain assessment is distinguishing nociceptive pain from neuropathic. Pain characterized as burning, shooting, pins, and needles, or electric shock-like point the differential towards a neuropathic origin of the patient's pain Sharp or throbbing pain is more likely to be acute nociceptive pain.

25. Which of the following white blood cell (WBC) counts clearly indicates leukocytosis?

A. 4,500/mm³

B. 7,000/mm³

C. 10,000/mm³

D. 25,000/mm³

Correct Answer: D. 25,000/mm³

Leukocytosis is any transient increase in the number of white blood cells (leukocytes) in the blood. The normal number of WBCs in the blood is 4,500 to 11,000 WBCs per microliter (4.5 to 11.0 × 109/L). Normal value ranges may vary slightly among different labs. Thus, a count of 25,000/mm3 indicates leukocytosis.

- **Option A:** A WBC count is a blood test to measure the number of white blood cells (WBCs) in the blood. WBCs are also called leukocytes. They help fight infections. A higher than normal WBC count is called leukocytosis. Leukocytosis is the broad term for an elevated white blood cell (WBC) count, typically above 11.0×10^9/L, on a peripheral blood smear collection. The exact value of WBC elevation can vary slightly between laboratories depending on their 'upper limits of normal' as identified by their reference ranges.
- **Option B:** The WBC value represents the sum-total of white blood cell subtypes, including neutrophils, eosinophils, lymphocytes, monocytes, atypical leukocytes that are not normally present on a peripheral blood smear (e.g., lymphoblasts), or any combination of these. The clinician should properly characterize the leukocytosis and determine if further evaluation and workup are indicated.
- **Option C:** Leukocytosis can occur acutely and often transiently or chronically, either in response to an inflammatory stressor/cytokine cascade or as part of an autonomous myeloproliferative neoplasm. Neutrophilia is the most common presentation, but clinicians should be aware of the other cell lines that can be involved in acute and chronic presentations. A detailed history, physical examination, medication reconciliation, full evaluation of a CBC with differential, and comparison to prior CBCs can help clinicians elucidate the underlying cause of leukocytosis and guide appropriate treatment.

26. The nurse is doing an admission assessment on a client with a history of duodenal ulcer. To determine whether the problem is currently active, the nurse would assess the client for which of the following most frequent symptom(s) of duodenal ulcer?

A. Pain that is relieved by food intake.

B. Pain that radiates down the right arm.

C. N/V

D. Weight loss

Correct Answer: A. Pain that is relieved by food intake.

The most frequent symptom of a duodenal ulcer is pain that is relieved by food intake. These clients generally describe the pain as burning, heavy, sharp, or “hungry” pain that often localizes in the midepigastric area. Duodenal ulcers occur when there is a disruption to the surface of the mucosa of the duodenum. These ulcers are part of peptic ulcer disease, which involves the stomach and the first part of the duodenum.

- **Option B:** The degree of disease progression before the initial diagnosis can affect the symptoms with which a patient may present. The location of the disease can also be differentiated based on symptoms. The pain associated with duodenal ulcers improves after meals, while the pain associated with gastric ulcers generally intensifies after meals.
- **Option C:** The typical presentation of a patient with gastric ulcers is epigastric pain that is worse with eating. It often correlates with mild nausea and early satiety. They often describe this pain as a sharp or burning type of pain that typically doesn’t radiate. The most common finding on the physical exam is epigastric tenderness.
- **Option D:** The client with a duodenal ulcer usually does not experience weight loss. These symptoms are usually more typical in the client with a gastric ulcer. Patients may present with upper GI bleeding. The clinician should ask if they are having any black tarry stools, hematemesis, coffee-ground emesis, or bright red blood per rectum. It is important to remember that up to 15% of patients who present with bright red rectal bleeding have a brisk upper GI bleed.

27. A female client is experiencing a painful and rigid abdomen and is diagnosed with a perforated peptic ulcer. A surgery has been scheduled and a nasogastric tube is inserted. The nurse should place the client before surgery in

A. Sims position

B. Supine position

C. Semi-fowlers position

D. Dorsal recumbent position

Correct Answer: C. Semi-fowlers position

Semi-fowlers position will localize the spilled stomach contents in the lower part of the abdominal cavity. Initiation of fluid resuscitation should start as soon as the diagnosis is made. Insertion of a nasogastric tube to decompress the stomach and a Foley catheter to monitor urine output are essential steps.

- **Option A:** Placing the client in a Sims position could let the stomach contents spill out of the perforation. Tachycardia and abdominal tenderness with rigidity are common clinical signs. Severe pain, systemic inflammatory response from chemical peritonitis, and fluid deficit either due to poor intake or vomiting or pyrexia lead to compensatory tachycardia.
- **Option B:** The supine position could aggravate the pain of the ulcer. PPU is a surgical emergency associated with high mortality if left untreated. In general, all patients with PPU require prompt resuscitation, intravenous antibiotics, analgesia, proton pump inhibitor medications, nasogastric tube, urinary catheter, and surgical source control.

- **Option D:** Placing the patient in a dorsal recumbent position would put pressure on the stomach contents and still aggravate the pain. When PUD worsens and eventually perforate, gastric juice and gas enter the peritoneal cavity leading to chemical peritonitis. Sudden onset of abdominal pain or acute deterioration of the ongoing abdominal pain is typical of PPU. Typically the pain never completely subsides despite usual premedical remedies and forces the patient to seek medical attention.

28. At what point after a burn injury should the nurse be most alert for the complication of hypokalemia?

A. Immediately following the injury

B. During the fluid shift

C. During fluid remobilization

D. During the late acute phase

Correct Answer: C. During fluid remobilization

Hypokalemia is most likely to occur during the fluid remobilization period as a result of dilution, potassium movement back into the cells, and increased potassium excreted into the urine with the greatly increased urine output. In an attempt to prevent hypokalemia it is advised to add ’20-30 mEq/1 of potassium to the hypotonic fluids in order to compensate for urinary losses and intracellular shift; it is also mandatory to correct precipitating factors such as increased pH, hypomagnesemia, and several drugs.

- **Option A:** In major burns. intravascular volume is lost in burned and unburned tissues: this process is due to an increase in vascular permeability, increased interstitial osmotic pressure in burn tissue. and cellular edema. with the most significant shifts occurring in the first hours. Hyponatremia is frequent, and the restoration of sodium losses in the burn tissue is, therefore, essential hyperkalemia is also characteristic of this period because of the massive tissue necrosis.
- **Option B:** The early post-resuscitation phase is a period of transition from the shock phase to the hypermetabolic phase, and fluid strategies should change radically with a view to restoring losses due to water evaporation. The main changes in this period are hypernatremia, hypocalcemia, hypokalemia, hypomagnesemia, and hypophosphatemia.
- **Option D:** The acute phase of burns is defined as a period extending from the onset of burns with shock to the time taken for wound epithelialization which normally takes about 12 to 14 days if management of burns is adequate.

29. A 25-year-old client with Grave’s disease is admitted to the unit. What would the nurse expect the admitting assessment to reveal?

A. Bradycardia

B. Decreased appetite

C. Exophthalmos

D. Weight gain

Correct Answer: C. Exophthalmos

Exophthalmos (protrusion of eyeballs) often occurs with hyperthyroidism. Graves' orbitopathy (ophthalmopathy) is caused by inflammation, cellular proliferation and increased growth of extraocular muscles and retro-orbital connective and adipose tissues due to the actions of thyroid stimulating antibodies and cytokines released by cytotoxic T lymphocytes (killer cells). These cytokines and thyroid stimulating antibodies activate periorbital fibroblasts and preadipocytes, causing synthesis of excess hydrophilic glycosaminoglycans (GAG) and retro-orbital fat growth.

- **Option A:** Physical signs of hyperthyroidism include tachycardia, systolic hypertension with increased pulse pressure, signs of heart failure (like edema, rales, jugular venous distension, tachypnea), atrial fibrillation, fine tremors, hyperkinesia, hyperreflexia, warm and moist skin, palmar erythema and onycholysis, hair loss, diffuse palpable goiter with thyroid bruit and altered mental status.
- **Option B:** Hyperthyroidism usually increases the appetite. If the client is taking in a lot more calories, they can gain weight even if their body is burning more energy. Make sure to eat healthy foods, get regular exercise, and work with a doctor on a nutrition plan. These steps can all help combat weight gain from an increased appetite.
- **Option D:** In younger patients, common presentations include heat intolerance, sweating, fatigue, weight loss, palpitation, hyper defecation, and tremors. Other features include insomnia, anxiety, nervousness, hyperkinesia, dyspnea, muscle weakness, pruritus, polyuria, oligomenorrhea or amenorrhea in the female, loss of libido, and neck fullness.

30. A male client with type 1 diabetes mellitus asks the nurse about taking an oral antidiabetic agent. Nurse Jack explains that these medications are only effective if the client:

A. Prefers to take insulin orally.

B. Has type 2 diabetes.

C. Has type 1 diabetes.

D. Is pregnant and has type 2 diabetes.

Correct Answer: B. Has type 2 diabetes.

Oral antidiabetic agents are only effective in adult clients with type 2 diabetes. Antidiabetic drugs (with the exception of insulin are all pharmacological agents that have been approved for hyperglycemic treatment in type 2 diabetes mellitus (DM). If lifestyle modifications (weight loss, dietary modification, and exercise) do not sufficiently reduce A1C levels (target level: ? 7%), pharmacological treatment with antidiabetic drugs should be initiated.

- **Option A:** These drugs may be classified according to their mechanism of action as insulinotropic or non-insulinotropic. They are available as monotherapy or combination therapies, with the latter involving two (or, less commonly, three) antidiabetic drugs and/or insulin. The drug of choice for all type 2 diabetic patients is metformin. This drug has beneficial effects on glucose metabolism and promotes weight loss or at least weight stabilization.
- **Option C:** Oral antidiabetic agents aren't effective in type 1 diabetes. All patients with T1DM require insulin therapy. Multiple daily insulin injections (MDI) using a basal/bolus insulin regimen or continuous subcutaneous insulin infusion through an insulin pump are the preferred treatment.
- **Option D:** Pregnant and lactating women aren't prescribed oral antidiabetic agents because the effect on the fetus is uncertain. Most antidiabetic drugs are not recommended or should be used with caution in patients with moderate or severe renal failure or other significant comorbidities. Oral

antidiabetic drugs are not recommended during pregnancy or breastfeeding.

31. Reviews of the literature are conducted for PURPOSES OF RESEARCH as well as for the CONSUMER OF RESEARCH. How are these reviews similar? Select all that apply.

A. Amount of literature required to be reviewed.

B. Degree of critical reading required.

C. Importance of conceptual literature.

D. Purpose of the review.

E. Knowledge of the research findings

Correct Answers: B, C

The purpose of a literature review is to gain an understanding of the existing research and debates relevant to a particular topic or area of study, and to present that knowledge in the form of a written report.

- **Option A:** A paper that has 10 pages of content (the body of the paper) needs at least 10 sources in its literature review. A thesis of 100 pages (in the body) includes at least 100 sources.
- **Option B:** A literature review surveys books, scholarly articles, and any other sources relevant to a particular issue, area of research, or theory, and by so doing, provides a description, summary, and critical evaluation of these works in relation to the research problem being investigated.
- **Option C:** Literature reviews are designed to provide an overview of sources the researcher has explored while researching a particular topic and to demonstrate to the readers how the research fits within a larger field of study.
- **Option D:** A literature review establishes familiarity with and understanding of current research in a particular field before carrying out a new investigation. Conducting a literature review should enable the researcher to find out what research has already been done and identify what is unknown within the topic.
- **Option E:** Being aware is in part a matter of being able to distinguish what the researcher does know based on the information provided by research findings from what he does not know. It is also a matter of having some awareness about what he can and cannot reasonably know as he encounters research findings.

32. A 19-year-old comes into the emergency department with acute asthma. His respiratory rate is 44 breaths/minute, and he appears to be in acute respiratory distress. Which of the following actions should be taken first?

A. Take a full medication history.

B. Give a bronchodilator by nebulizer.

C. Apply a cardiac monitor to the client.

D. Provide emotional support to the client.

Correct Answer: B. Give a bronchodilator by nebulizer.

The client is having an acute asthma attack and needs to increase oxygen delivery to the lung and body. Nebulized bronchodilators open airways and increase the amount of oxygen delivered. Medical management includes bronchodilators like beta-2 agonists and muscarinic antagonists (salbutamol and ipratropium bromide respectively) and anti-inflammatories such as inhaled steroids (usually beclomethasone but steroids via any route will be helpful).

- **Option A:** First, resolve the acute phase of the attack and how to prevent attacks in the future. During an acute exacerbation, there may be a fine tremor in the hands due to salbutamol use, and mild tachycardia. Patients will show some respiratory distress, often sitting forward to splint open their airways.
- **Option C:** It may not be necessary to place the client on a cardiac monitor because he's only 19-years-old unless he has a past medical history of cardiac problems. On auscultation, a bilateral, expiratory wheeze will be heard. In life-threatening asthma, the chest may be silent, as air cannot enter or leave the lungs, and there may be signs of systemic hypoxia.
- **Option D:** Measures to take include calming the patient to get them to relax, moving outside or away from the likely source of allergen, and cooling the person. Removing clothing and washing the face and mouth to remove allergens is sometimes done, but it is not evidence-based.

33. Calcium is absorbed in the GI tract under the influence of:

A. Vitamin D

B. Glucose

C. HCl

D. Vitamin C

Correct Answer: A. Vitamin D

Calcium is absorbed in the GI tract under the influence of vitamin D in its biologically active form. Vitamin D also increases the intestinal absorption of calcium, as well as bone resorption and the tubular reabsorption of calcium. The effects on intestinal reabsorption of calcium and bone resorption seem to be due primarily to the active metabolite 1,25-DHCC, but other metabolites may contribute to some of the other effects on serum calcium.

- **Option B:** Abnormal calcium regulation may contribute to reduced ?-cells function, thereby promoting altered glucose homeostasis. In vitro studies have also found that high cytosolic calcium may contribute to insulin resistance within adipocytes and skeletal muscle.
- **Option C:** Oral calcium carbonate (0-5 g, pH 9-4) increased serum gastrin and gastric acid output with slight but insignificant change in serum calcium. A similar rise in serum calcium during an intravenous infusion of calcium gluconate failed to increase serum gastrin and gastric acid output.
- **Option D:** Vitamin C blocks cells that break down our bones and helps us make more cells responsible for bone formation. It also regulates important bone-building minerals, like calcium, in our bodies. Most people can get enough vitamin C through diet alone.

34. A client with a bowel resection and anastomosis returns to his room with an NG tube attached to intermittent suction. Which of the following observations indicates that the nasogastric suction is working properly?

A. The client is able to swallow

B. The client's abdomen is soft

C. The client has active bowel sounds

D. The client's abdominal dressing is dry and intact

Correct Answer: B. The client's abdomen is soft

- Option B: Nasogastric suction decompresses the stomach and leaves the abdomen soft and non distended.
- Options A, C, and D: Ability of the patient to swallow, active bowel sounds, and abdominal dressing does not relate to the effectiveness of the NG suction.

35. Kent, a new staff nurse asks her preceptor nurse how to obtain a blood sample from a patient with a portacath device. The preceptor nurse teaches the new staff nurse:

A. The sample will be withdrawn into a syringe attached to the Portacath needle and then placed into a vacutainer.

B. Portacath devices are not used to obtain blood samples because of the risk of clot formation.

C. The vacutainer will be attached to the Portacath needle to obtain a direct sample.

D. Any needle and syringe may be utilized to obtain the sample.

Correct Answer: A. The sample will be withdrawn into a syringe attached to the Portacath needle and then placed into a vacutainer.

A special port-a-cath needle is used to access the port-a-cath device. A syringe is attached and the sample is obtained. One of the primary reasons for the insertion of a Portacath device is the need for frequent or long-term blood sampling. A Portacath is a small chamber or reservoir that sits under the skin at the end of the central line. The other end of the line sits in a large vein close to the heart. The client may feel the chamber of the Portacath, but unless he is very thin he can't usually see it.

- **Option B:** The line is flushed regularly with heparin (an anti-clotting drug) or saltwater (saline) to clean the line and prevent clotting. Once a port is cleared for use, a patient may receive intravenous therapy through it for the course of his/her treatment. An adult portal chamber can take about 2,000 punctures on average, which may last a patient several years.
- **Option C:** A vacutainer will exert too much suction on the central line resulting in the collapse of the line. One can draw blood from a CVC using the discard method with direct Vacutainer connection or a syringe or using the push-pull method with a syringe. A vacutainer is a blood collection tube (sterile glass or plastic tube) used to collect blood samples for laboratory testing. These tubes have a closure that is evacuated to create a vacuum inside the tube thereby enabling a predetermined amount of blood to be withdrawn.
- **Option D:** Only special Portacath needles should be used to access the Portacath device. A port can be single or double lumen. Single lumen ports are most common and typically sufficient for patients requiring scheduled intravenous therapy. However, having a double lumen port is advantageous for patients who often receive multiple intravenous therapies at once. If two intravenous agents aren't compatible in the same line, you can infuse both simultaneously in different port lumens without complication. The double lumen port also allows a concurrent infusion of medication, chemotherapy, blood products, or parenteral nutrition. It is also beneficial for drawing labs without interruption of an infusion.

36. The nurse manager is observing a new nursing graduate caring for a burned client in protective isolation. The nurse manager intervenes if the new nursing graduate planned to implement which incorrect component of protective isolation technique?

A. Performing strict handwashing techniques.

B. Wearing protective garb, including a mask, gloves, cap, shoe covers, gowns, and a plastic apron.

C. Using sterile bed sheets and linens.

D. Wearing gloves and a gown only when giving direct care to the client.

Correct Answer: D. Wearing gloves and a gown only when giving direct care to the client.

Thorough hand washing is performed before and after each contact with the burn-injured client. During the delivery of healthcare, avoid unnecessary touching of surfaces in close proximity to the patient to prevent both contaminations of clean hands from environmental surfaces and transmission of pathogens from contaminated hands to surfaces.

- **Option A:** The physical action of washing and rinsing hands under such circumstances is recommended because alcohols, chlorhexidine, iodophors, and other antiseptic agents have poor activity against spores.
- **Option B:** Protective garbs such as masks, gloves, caps, shoe covers, gowns, and a plastic apron need to be worn when having direct contact with the client. Remove gloves after contact with a patient and/or the surrounding environment (including medical equipment) using proper technique to prevent hand contamination.
- **Option C:** Sterile sheets and linen are used due to the high risk of infection. Soiled textiles, including bedding, towels, and patient or resident clothing may be contaminated with pathogenic microorganisms. However, the risk of disease transmission is negligible if they are handled, transported, and laundered in a safe manner.

37. A group of community nurses sees and plans care for various clients with different types of problems. Which of the following clients would they consider the most vulnerable to post-traumatic stress disorder?

A. An eight (8)-year-old boy with asthma who has recently failed a grade in school.

B. A 20-year-old college student with DM who experienced date rape.

C. A 40-year-old widower who has recently lost his wife to cancer.

D. A wife of an individual with a severe substance abuse problem.

Correct Answer: B. A 20-year-old college student with DM who experienced date rape

Post-traumatic stress disorder is caused by the experience of severe, specific trauma. Rape is a severely traumatic event. Posttraumatic stress disorder (PTSD) is a syndrome that results from exposure to real or threatened death, serious injury, or sexual assault. Following the traumatic event, PTSD is common and is one of the serious health concerns that is associated with comorbidity, functional impairment, and increased mortality with suicidal ideations and attempts.

- **Option A:** The development of posttraumatic stress disorder in individuals is linked to a large number of factors. These include experiencing a traumatic event such as a severe threat or a physical injury, a near-death experience, combat-related trauma, sexual assault, interpersonal

conflicts, child abuse, or after a medical illness. Chronic PTSD occurs in patients who are unable to recover from the trauma due to maladaptive responses.

- **Option C:** The risk factors for the development of PTSD include biological and psychological factors such as gender (more prevalent in women), childhood adversities, pre-existing mental illness, low socioeconomic status, less education, lack of social support. Nature and the severity of the trauma are also accountable while determining the risk factors for PTSD.
- **Option D:** Although this situation is certainly stressful, they are not at the level of severe trauma. The symptoms of PTSD include persistently re-experiencing the traumatic event, intrusive thoughts, nightmares, flashbacks, dissociation(detachment from oneself or reality), and intense negative emotional (sadness, guilt) and physiological reaction on being exposed to the traumatic reminder.[1] Furthermore, problems with sleep and concentration, irritability, increased reactivity, increased startle response, hypervigilance, avoidance of traumatic triggers also occur.

38. The nurse is reviewing the record of a female client with Crohn's disease. Which stool characteristics should the nurse expect to note documented in the client's record?

A. Diarrhea

B. Chronic constipation

C. Constipation alternating with diarrhea

D. Stools constantly oozing from the rectum

Correct Answer: A. Diarrhea

Crohn's disease is characterized by non-bloody diarrhea of usually not more than four to five stools daily. Over time, the diarrhea episodes increase in frequency, duration, and severity. In CD, the inflammation extends through the entire thickness of the bowel wall from the mucosa to the serosa. The disease runs a relapsing and remitting course. The other options are not associated with diarrhea.

- **Option B:** Patients with flare-ups of Crohn's disease typically present with abdominal pain (right lower quadrant), flatulence/bloating, diarrhea (can include mucus and blood), fever, weight loss, anemia. In severe cases, perianal abscess, perianal Crohn's disease, and cutaneous fistulas can be seen.
- **Option C:** When the small bowel is involved, it may present with diarrhea, malabsorption, weight loss, abdominal pain, and anorexia. Enterovesical fistulae may present with pneumaturia, recurrent urinary tract infections, and feculent vaginal discharge.
- **Option D:** Granuloma formation is very common in Crohn's disease but their absence does not exclude the diagnosis. The ongoing inflammation and scarring lead to bowel obstruction and stricture formation. Crohn's disease is also associated with enterovesical, enteroenteral, enterocutaneous and enterovaginal fistulas.

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

A. Developing a content outline.

B. Documenting drugs given.

C. Establishing outcome criteria.

D. Setting realistic client goals.

Correct Answer: B. Documenting drugs given.

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

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

40. When developing the plan of care for a client receiving haloperidol, which of the following medications would nurse Monet anticipate administering if the client developed extrapyramidal side effects?

A. olanzapine (Zyprexa)

B. paroxetine (Paxil)

C. benztropine mesylate (Cogentin)

D. lorazepam (Ativan)

Correct Answer: C. benztropine mesylate (Cogentin)

The drug of choice for a client experiencing extrapyramidal side effects from haloperidol (Haldol) is benztropine mesylate (Cogentin) because of its anticholinergic properties. Benztropine is FDA approved as adjunctive therapy of all forms of parkinsonism. It is also useful for drug-induced extrapyramidal symptoms and the prevention of dystonic reactions and acute treatment of dystonic reactions. Furthermore, benztropine has further off-label use as it can treat chronic sialorrhea occurring in developmentally-disabled patients.

- **Option A:** Olanzapine also has approval for use with fluoxetine, a selective serotonin reuptake inhibitor (SSRI), in patients with episodes of depression associated with bipolar disorder type 1 and treatment-resistant depression. Olanzapine is an atypical (second-generation) antipsychotic that exerts its action primarily on dopamine and serotonin receptors. It works on dopamine D2 receptors in the mesolimbic pathway as an antagonist, blocking dopamine from having a potential action at the postsynaptic receptor. Olanzapine binds loosely to the receptor and dissociates easily, allowing for normal dopamine neurotransmission.

- **Option B:** Paroxetine is a selective serotonin reuptake inhibitor (SSRI), and, as such, is identified as an antidepressant. It is FDA approved for major depressive disorder (MDD), obsessive-compulsive disorder (OCD), social anxiety disorder (SAD), panic disorder, posttraumatic stress disorder (PTSD), generalized anxiety disorder (GAD), and premenstrual dysphoric disorder (PMDD), vasomotor symptoms associated with menopause.
- **Option D:** Lorazepam has common use as the sedative and anxiolytic of choice in the inpatient setting owing to its fast (1 to 3 minute) onset of action when administered intravenously. Lorazepam is also one of the few sedative-hypnotics with a relatively clean side effect profile. Lorazepam is FDA approved for short-term (4 months) relief of anxiety symptoms related to anxiety disorders, anxiety-associated insomnia, anesthesia premedication in adults to relieve anxiety, or to produce sedation/amnesia, and treatment of status epilepticus.

42. The nurse in charge is teaching a client with emphysema how to perform pursed-lip breathing. The client asks the nurse to explain the purpose of this breathing technique. Which explanation should the nurse provide?

A. It helps prevent early airway collapse.

B. It increases inspiratory muscle strength.

C. It decreases use of accessory breathing muscles.

D. It prolongs the inspiratory phase of respiration.

Correct Answer: A. It helps prevent early airway collapse.

Pursed-lip breathing helps prevent early airway collapse. Learning this technique helps the client control respiration during periods of excitement, anxiety, exercise, and respiratory distress. The positive pressure created opposes the forces exerted on the airways from the flow of exhalation. As a result, pursed-lip breathing helps support breathing by the opening of the airways during exhalation and increasing excretion of volatile acids in the form of carbon dioxide preventing or relieving hypercapnia.

- **Option B:** To increase inspiratory muscle strength and endurance, the client may need to learn inspiratory resistive breathing. Inspiratory resistive breathing is a clinically relevant model encountered in many disease states such as upper airway obstruction, chronic obstructive pulmonary disease (COPD) exacerbations and asthma attacks. Resistive breathing increases the plasma level of proinflammatory cytokines.
- **Option C:** To decrease accessory muscle use and thus reduce the work of breathing, the client may need to learn diaphragmatic (abdominal) breathing. Diaphragmatic breathing is a type of breathing exercise that helps strengthen the diaphragm, an important muscle that helps breathe as it represents 80% of breathing. This breathing exercise is also sometimes called(belly breathing or abdominal breathing).
- **Option D:** In pursed-lip breathing, the client mimics a normal inspiratory-expiratory (I:E) ratio of 1:2. (A client with emphysema may have an I:E ratio as high as 1:4.). The expiratory phase of respiration is going to prolong when compared to inspiration to expiration ratio in normal breathing.

43. The nurse assesses a male client's respiratory status. Which observation indicates that the client is experiencing difficulty breathing?

A. Diaphragmatic breathing

B. Use of accessory muscles

C. Pursed-lip breathing

D. Controlled breathing

Correct Answer: B. Use of accessory muscles

The use of accessory muscles for respiration indicates the client is having difficulty breathing. Accessory muscles of respiration are muscles other than the diaphragm and intercostal muscles that may be used for labored breathing. The sternocleidomastoid, spinal, and neck muscles may be used as accessory muscles of respiration; their use is a sign of an abnormal or labored breathing pattern. Diaphragmatic and pursed-lip breathing are two controlled breathing techniques that help the client conserve energy.

- **Option A:** Diaphragmatic breathing is a type of breathing exercise that helps strengthen the diaphragm, an important muscle that helps breathe as it represents 80% of breathing. This breathing exercise is also sometimes called(belly breathing or abdominal breathing).
- **Option C:** Pursed lip breathing is a technique that helps people living with asthma or COPD when they experience shortness of breath. Pursed lip breathing helps control shortness of breath, and provides a quick and easy way to slow the pace of breathing, making each breath more effective.
- **Option D:** Controlled breathing' (sometimes called 'pursed lips breathing') will help the client to get as much air as possible into the lungs. This may help to ease shortness of breath. It is one way to slow down breathing and to make each breath as effective as possible.

44. Mr. Rodriguez is admitted with severe pain in the knees. Which form of arthritis is characterized by urate deposits and joint pain, usually in the feet and legs, and occurs primarily in men over age 30?

A. Septic arthritis

B. Traumatic arthritis

C. Intermittent arthritis

D. Gouty arthritis

Correct Answer: D. Gouty arthritis

Gouty arthritis, a metabolic disease, is characterized by urate deposits and pain in the joints, especially those in the feet and legs. Urate deposits don't occur in septic or traumatic arthritis.

- **Option A:** Septic arthritis results from bacterial invasion of a joint and leads to inflammation of the synovial lining.
- **Option B:** Traumatic arthritis results from blunt trauma to a joint or ligament.
- **Option C:** Intermittent arthritis is a rare, benign condition marked by regular, recurrent joint effusions, especially in the knees.

45. When monitoring a female client recently admitted for treatment of cocaine addiction, nurse Aaron notes sudden increases in the arterial blood pressure and heart rate. To correct these problems, the nurse expects the physician to prescribe:

A. Norepinephrine (Levophed) and Lidocaine (Xylocaine)

B. Nifedipine (Procardia) and Lidocaine.

C. Nitroglycerin (Nitro-Bid IV) and Esmolol (Brevibloc)

D. Nifedipine and Esmolol

Correct Answer: D. Nifedipine and Esmolol

This client requires a vasodilator, such as nifedipine, to treat hypertension, and a beta-adrenergic blocker, such as esmolol, to reduce the heart rate. Nifedipine is a calcium channel blocker that belongs to the dihydropyridine subclass. It is primarily used as an antihypertensive and antianginal medication. Esmolol (esmolol hydrochloride) is an intravenous cardioselective beta-1 adrenergic antagonist. Esmolol is FDA-approved for short-term duration use in control of supraventricular tachycardia, such as a rapid ventricular rate in patients with atrial fibrillation or atrial flutter.

- **Option A:** Norepinephrine's predominant use is as a peripheral vasoconstrictor. Specifically, the FDA has approved its use for blood pressure control in specific acute hypotensive states, as well as being a potential adjunct in the treatment of cardiac arrest with profound hypotension.
- **Option B:** Lidocaine, an antiarrhythmic, isn't indicated because the client doesn't have an arrhythmia. The drug is commonly used for local anesthesia, often in combination with epinephrine (which acts as a vasopressor and extends its duration of action at a site by opposing the local vasodilatory effects of lidocaine).
- **Option C:** Although nitroglycerin may be used to treat coronary vasospasm, it isn't the drug of choice in hypertension. Nitroglycerin is a vasodilatory drug used primarily to provide relief from anginal chest pain. Nitroglycerin has been FDA approved since 2000 and was first sold by Pfizer under the brand name Nitrostat. It is currently FDA approved for the acute relief of an attack or acute prophylaxis of angina pectoris secondary to coronary artery disease.

46. At Hope Pediatric Center, Nurse Jordan is reviewing the case of 8-year-old Lily, who is currently being treated for leukemia. Lily's medical journey has been filled with frequent hospital visits, intensive chemotherapy sessions, and consistent monitoring. Lily's mother, Mrs. Williams, rushes into the clinic looking panicked and informs Nurse Jordan that Lily's cousin, who visited their home two days ago, has just been diagnosed with chickenpox. Given Lily's compromised immunity due to leukemia and chemotherapy, Mrs. Williams is gravely concerned about the potential repercussions of this exposure. Nurse Jordan recalls the center's protocol for such situations and assesses the appropriate treatment measures for Lily. Given the circumstances, which treatment measure is most appropriate for Lily, who has leukemia and has been exposed to chickenpox?

A. No treatment is indicated.

B. Acyclovir (Zovirax) should be started on exposure.

C. Varicella-zoster immunoglobulin (VZIG) should be given with the evidence of disease.

D. VZIG should be given within 72 hours of exposure.

E. Administer a booster dose of the varicella vaccine.

F. Start prophylactic antibiotics to prevent secondary infections.

Correct Answer: D. VZIG should be given within 72 hours of exposure.
VZIG provides passive immunity to chickenpox and is recommended for high-risk individuals like Lily, who are immunocompromised. It should be given as soon as possible after exposure to be effective.

- **Option A:** Given Lily's compromised immune system, doing nothing could lead to severe complications if she contracts the disease.
- **Option B:** While antiviral medications such as acyclovir can be useful in treating chickenpox, the priority for someone with leukemia and without prior immunity to chickenpox would be passive immunization through VZIG.
- **Option C:** Waiting for evidence of disease is risky, especially in an immunocompromised child. It's better to administer VZIG soon after exposure.
- **Option E:** The vaccine is live-attenuated and isn't typically given to severely immunocompromised patients due to the potential risk.
- **Option F:** Chickenpox is a viral infection, and antibiotics won't prevent its onset. They might be considered if there's a concern for secondary bacterial infections, but it's not the primary measure following exposure.

47. A camp nurse is applying sunscreen to a group of children enrolled in swim classes. Chemical sunscreens are most effective when applied:

A. Just before sun exposure

B. 5 minutes before sun exposure

C. 15 minutes before sun exposure

D. 30 minutes before sun exposure

Correct Answer: D. 30 minutes before sun exposure

- Option D: Sunscreens of at least an SPF of 15 should be applied 20–30 minutes before going into the sun to allow the product to bind into the skin.
- Options A, B, and C: These do not allow sufficient time for sun protection.

48. A client is to receive epoetin (Epogen) injections. What laboratory value should the nurse assess before giving the injection?

A. Hematocrit

B. Partial thromboplastin time

C. Hemoglobin concentration

D. Prothrombin time

Correct Answer: A. Hematocrit

Epogen is a recombinant DNA form of erythropoietin, which stimulates the production of RBCs and therefore causes the hematocrit to rise. The elevation in hematocrit causes an elevation in blood pressure; therefore, the blood pressure is a vital sign that should be checked. Although epoetin alfa does not affect blood pressure directly, it may raise blood pressure in the early phase after administration when the hematocrit is increasing acutely. So, it should be used very carefully in patients with uncontrolled hypertension. Additionally, patients may require dosage adjustments of

antihypertensive therapy after initiation of this medication.

- **Option B:** Due to a sudden increase in hematocrit, blood viscosity, and peripheral vascular resistance, particularly dialysis patients, may require to adjust anticoagulation. Serious thromboembolic events like increased clot formation in atrioventricular (AV) shunts, migratory thrombophlebitis, microvascular thrombosis, thrombosis of major vessels like retinal, temporal, pulmonary, and renal vessels increases.
- **Option C:** It increases the risk of serious cardiovascular events, vascular access thrombosis, stroke, myocardial infarction, venous thromboembolism in clinical studies when target Hb levels reach more than 11 g/dL or a rapid rise in hemoglobin over 1 g/dL over two weeks (U.S. Boxed Warning).
- **Option D:** PT is not monitored for this drug. Serum ferritin and transferrin saturation require measurement before initiation of epoetin alfa. If the serum ferritin level is less than 100 ng/mL and/or serum transferrin saturation level is less than 20%, then supplemental iron should be started before the initiation of epoetin alfa treatment.

49. A nurse understands that a patient may experience pain during peritoneal dialysis because of which of the following? Select all that apply.

A. Warming the dialysate

B. Too rapid installation

C. Infiltration of the solution into the bloodstream

D. Accumulation of dialysate solution under the diaphragm

E. Too rapid outflow of the dialysate

Correct Answer: B and D.

Infusion pain is a frequent problem in peritoneal dialysis (PD), and can markedly vary in intensity and risk. In general, treatment of infusion pain is dictated by the specific cause.

- **Option A:** Warming helps with discomfort. Warming the solution increases the rate of urea removal by dilating peritoneal vessels. Cold dialysate causes vasoconstriction, which can cause discomfort and excessively lower the core body temperature, precipitating cardiac arrest.
- **Option B:** If pain is caused by jetting of dialysate against the peritoneum, reducing the infusion rate may alleviate the pain.
- **Option C:** The dialysate does not infiltrate the circulation. Inadvertent introduction of air into the abdomen irritates the diaphragm and results in referred pain to the shoulder blade. This type of discomfort may also be reported during initiation of therapy or during infusions and usually is related to stretching and irritation of the diaphragm with abdominal distension.
- **Option D:** Not only the microorganisms but also free air can enter the peritoneal cavity. Presence of free air in the peritoneal cavity is called pneumoperitoneum (PP). Abdominal pain in a patient with a PD catheter in situ has many potential differential diagnoses.
- **Option E:** Rapid outflow doesn’t cause pain. Abdominal pain or discomfort during complete drain of dialysis solution or during installation of peritoneal dialysis solution into an empty peritoneal cavity is an infrequent finding in CPD patients. Usually the pain is noted during the drain phase, near the end of the drain.

50. In a specialized pediatric oncology unit, a 7-year-old patient, Noah, has been diagnosed with acute lymphoblastic leukemia (ALL) and is scheduled to commence a chemotherapy regimen as a part of his treatment plan. The pediatric oncology nursing team is meticulously preparing to administer the chemotherapy, cognizant of the potential adverse effects and the critical importance of precise administration to optimize treatment efficacy and patient safety. The charge nurse, with a well-versed knowledge in pediatric oncology nursing, is reviewing the protocol with the nursing staff to ensure a thorough understanding and adherence to the guidelines for chemotherapy administration. The discussion is comprehensive, covering a spectrum of considerations including monitoring for adverse reactions, ensuring a patent intravenous line, and being vigilant for signs of infusion-related complications. Which of the following actions, if performed by the nursing staff during the administration of chemotherapy to Noah, would be deemed inappropriate?

A. Monitoring the child for both general and specific adverse effects.

B. Observing the child for 10 minutes to note for signs of anaphylaxis.

C. Administering medication through a free-flowing intravenous line.

D. Assessing for signs of infusion infiltration and irritation.

E. Pre-medicating the child with anti-emetics as ordered, to manage nausea and vomiting.

F. Conducting a thorough assessment of the child's overall health status and obtaining baseline vital signs prior to administering chemotherapy.

G. Administering the chemotherapy at a rapid rate to minimize the duration of the infusion.

Correct Answer: G. Administering the chemotherapy at a rapid rate to minimize the duration of the infusion.
Administering chemotherapy at a rapid rate to minimize infusion duration is inappropriate and dangerous. Chemotherapy agents are dosed specifically to balance efficacy with toxicity and should be administered at the prescribed rate to ensure patient safety and treatment effectiveness.

- **Option A:** Monitoring for adverse effects is a crucial aspect of chemotherapy administration to ensure the safety and well-being of the patient.
- **Option B:** Observing for signs of anaphylaxis, especially in the initial phase post administration, is crucial for early detection and management of a severe allergic reaction. However, an extended observation period might be more prudent given the severity of such a reaction.
- **Option C:** Ensuring a free-flowing intravenous line is a fundamental step to ensure accurate dosage delivery and to prevent complications such as infiltration or extravasation.
- **Option D:** Assessing for infusion infiltration and irritation is essential to prevent, identify, and manage potential complications associated with IV chemotherapy administration.
- **Option E:** Pre-medication with anti-emetics can be crucial for managing chemotherapy-induced nausea and vomiting, which are common side effects of chemotherapy.
- **Option F:** Conducting a thorough assessment prior to chemotherapy administration is a pivotal step in ensuring the patient's readiness for chemotherapy and for recognizing any potential contraindications.

51. The nurse prepares discharge instructions for a male client following cryosurgery for the treatment of a malignant skin lesion. Which of the following should the nurse include in the instruction?

A. Avoid showering for 7 to 10 days

B. Apply ice to the site to prevent discomfort

C. Apply alcohol-soaked dressing twice a day

D. Clean the site with hydrogen peroxide to prevent infection

Correct Answer: D. Clean the site with hydrogen peroxide to prevent infection

Cryosurgery involves the local application of liquid nitrogen to isolated lesions and causes cell death and tissue destruction. The nurse informs the client that swelling and increased tenderness of the treated area can occur when the skin thaws. Tissue freezing is followed by hemorrhagic blister formation in 1 to 2 days. The nurse instructs the client to clean the treatment site with hydrogen peroxide to prevent secondary infection. A topical antibiotic also may be prescribed.

- **Option A:** The client does not need to avoid showering.
- **Option B:** Application of a warm, damp washcloth intermittently to the site will provide relief from any discomfort.
- **Option C:** Alcohol-soaked dressings will cause irritation.

52. All of the following measures are recommended to prevent pressure ulcers except:

A. Massaging the reddened area with lotion.

B. Using a water or air mattress.

C. Adhering to a schedule for positioning and turning.

D. Providing meticulous skin care.

Correct Answer: A. Massaging the reddened area with lotion

Nurses and other healthcare professionals previously believed that massaging a reddened area with lotion would promote venous return and reduce edema to the area. However, research has shown that massage only increases the likelihood of cellular ischemia and necrosis to the area.

- **Option B:** In patients with a high risk of developing pressure injuries, support surfaces to alleviate pressure can be used. This can include higher-speciation foam mattresses, medical-grade sheepskins, continuous low-pressure supports, alternating-pressure devices, low air loss therapy; however, the effectiveness of these devices compared to other surfaces in the treatment of existing pressure injuries has not been conclusively established.
- **Option C:** General care for pressure injuries can include redistribution of pressure with the use of support surfaces and changes in positioning. Redistribution of pressure and appropriate patient positioning is required to prevent the development and worsening of pressure injuries, as these methods can reduce force from friction and shear.
- **Option D:** Wound care, including maintaining a clean environment, debridement, application of dressings, monitoring, and various adjunctive therapies, is generally advised to facilitate the healing of pressure injuries. Options for treatment can be guided by the stage of the pressure injury. Stage

1 pressure injuries can be covered with transparent film dressings as needed.

53. Important teaching for clients receiving antipsychotic medication such as haloperidol (Haldol) includes which of the following instructions? Select all that apply.

A. Use sunscreen because of photosensitivity.

B. Take the antipsychotic medication with food.

C. Have routine blood tests to determine levels of the medication.

D. Abstain from eating aged cheese.

Correct Answers: A & B

Photosensitivity is an adverse effect of many drugs, characteristically producing skin lesions in the areas exposed to light, which includes the face, “V” area of the neck, extensor surfaces of forearms, and dorsa of hands with sparing of submental and retroauricular areas. Two major mechanisms mediating drug-induced photosensitivity reactions are phototoxic and photoallergic responses. Antipsychotics should be taken with food to avoid gastric upset.

- **Option C:** Due to potential side effects development, patients receiving haloperidol require monitoring, especially when receiving the intramuscular form. It can be easily monitored by taking blood levels. It has a therapeutic range of 2 to 15 ng/ml in serum. Blood levels should be monitored at 12-hour or 24-hour intervals or after the last dose of haloperidol use in a patient.
- **Option D:** MAOIs prevent the breakdown of tyramine found in the body as well as certain foods, drinks, and other medications. Patients that take MAOIs and consume tyramine-containing foods or drinks will exhibit high serum tyramine level. Examples of high levels of tyramine in food are types of fish, as well as types of meat, including sausage, turkey, liver, and salami. Also, certain fruits can contain tyramine like overripe fruits, avocados, bananas, raisins, or figs. Further examples are cheeses, alcohol, and fava beans; all of these should be avoided even after two weeks of stopping MAOIs.

54. Nurse Mary is caring for a wheelchair-bound client. Which piece of equipment impedes circulation to the area it’s meant to protect?

A. Polyurethane foam mattress

B. Ring or donut

C. Gel flotation pad

D. Waterbed

Correct Answer: B. Ring or donut

Rings or donuts aren’t to be used because they restrict circulation. Selection of a device may depend on factors such as mobility of the individual, the results of skin assessment, the level of and site at risk, weight, staff availability and skill plus the general health and condition of the individual. It is also important that any device is able to be cleaned and decontaminated effectively. It is accepted that these devices should be used in conjunction with other preventative strategies such as repositioning.

- **Option A:** Foam mattresses evenly distribute pressure. All studies showed a clinical benefit of higher specification foam mattresses (cubed foam mattress, soft foam mattress, pressure

redistributing foam mattress), in reducing the incidence of pressure ulcers when compared to standard hospital mattresses.

- **Option C:** Gel pads redistribute with the client's weight. A gel-filled pad and a pressure-reducing cushion (designed to improve tissue tolerance in sitting by providing more surface area and reducing peak pressure) were clinically beneficial compared to foam cushions for reducing the incidence of pressure ulcers in people who use a wheelchair.
- **Option D:** The water bed also distributes pressure over the entire surface. Both a bead-filled mattress and a water-filled mattress showed a clinical benefit for reducing the incidence of pressure ulcers when compared to standard hospital mattresses (type not specified).

55. What is the first step in the qualitative research process?

A. Data analysis

B. Sample

C. Review of literature

D. Study design

Correct Answer: C. Review of literature

Review of literature is the 1st step in the qualitative research process. A literature review is a survey of scholarly sources on a specific topic. It provides an overview of current knowledge, allowing the researcher to identify relevant theories, methods, and gaps in the existing research.

- **Option A:** Data analysis is the sixth step in the qualitative research process. Data Analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. An essential component of ensuring data integrity is the accurate and appropriate analysis of research findings.
- **Option B:** Sampling is the third step in the qualitative research process. Sampling is a process used in statistical analysis in which a predetermined number of observations are taken from a larger population. The methodology used to sample from a larger population depends on the type of analysis being performed, but it may include simple random sampling or systematic sampling.
- **Option D:** The study design is the second step in the qualitative research process. Study design is a process wherein the trial methodology and statistical analysis are organized to ensure that the null hypothesis is either accepted or rejected and the conclusions arrived at reflecting the truth.

56. Clients with type 1 diabetes may require which of the following changes to their daily routine during periods of infection?

A. No changes

B. Less insulin

C. More insulin

D. Oral antidiabetic agents

Correct Answer: C. More insulin

During periods of infection or illness, diabetics may need even more insulin to compensate for increased blood glucose levels. During illness, it is important that insulin be continued even if the

patient is unable to eat or is vomiting.

- **Option A:** The appropriate insulin dosage is dependent on the glycemic response of the individual to food intake and exercise regimens. A dosage algorithm suited to the individual's needs and treatment goals should be developed with the cooperation of the patient.
- **Option B:** Rapid-acting insulin analogs should be injected within 15 min before a meal or immediately after a meal. The most commonly recommended interval between injection of short-acting (regular) insulin and a meal is 30 min.
- **Option D:** Healthcare practitioners must encourage patients to combine lifestyle modifications with oral pharmacologic agents for optimal glycemic control, particularly as type 2 diabetes mellitus progresses with continued loss of pancreatic beta-cell function and insulin production.

57. The nurse is discussing breastfeeding with a postpartum client. Breastfeeding is contraindicated in the postpartum client with:

A. Diabetes

B. Positive HIV

C. Hypertension

D. Thyroid disease

Correct Answer: B. Positive HIV

Clients with HIV should not breastfeed because the infection can be transmitted to the baby through breast milk. The best way to prevent transmission of HIV to an infant through breast milk is to not breastfeed. In the United States, where mothers have access to clean water and affordable replacement feeding (infant formula), the CDC and the American Academy of Pediatrics recommend that HIV-infected mothers completely avoid breastfeeding their infants, regardless of ART and maternal viral load.

- **Option A:** Among women who had gestational diabetes, breastfeeding was associated with a lower rate of type 2 diabetes for up to 2 years after childbirth. The results suggest that breastfeeding after gestational diabetes may have lasting effects that reduce a woman's chance of developing type 2 diabetes.
- **Option C:** More children breastfed and longer duration of breastfeeding were associated with a lower risk of hypertension in postmenopausal women, and the degree of obesity and insulin resistance moderated the breastfeeding-hypertension association.
- **Option D:** The client with thyroid disease can be allowed to breastfeed. Some breastfeeding mothers with hypothyroidism struggle to make a full milk supply. Thyroid hormones play a role in normal breast development and helping breasts to make milk. When not enough thyroid hormones are made, a mother's milk supply may be affected.

58. During a nonstress test (NST), the electronic tracing displays a relatively flat line for fetal movement, making it difficult to evaluate the fetal heart rate (FHR). To mark the strip, the nurse in charge should instruct the client to push the control button at which time?

A. At the beginning of each fetal movement.

B. At the beginning of each contraction.

C. After every three fetal movements

D. At the end of fetal movement.

Correct Answer: A. At the beginning of each fetal movement

An NST assesses the FHR during fetal movement. In a healthy fetus, the FHR accelerates with each movement. By pushing the control button when a fetal movement starts, the client marks the strip to allow easy correlation of fetal movement with the FHR.

- **Option B:** The FHR is assessed during uterine contractions in the oxytocin contraction test, not the NST. The Non-Stress Test (NST) is an assessment tool used from 32 weeks of gestation to term to evaluate fetal health through the use of electronic fetal monitors that continuously record the fetal heart rate (FHR).
- **Option C:** Pushing the control button after every three fetal movements wouldn't allow accurate comparison of fetal movement and FHR change. Fetal activity may be recorded by the patient using an event marker or noted by the staff performing the test.
- **Option D:** The presence of fetal heart rate acceleration with fetal movement is the principle behind the non-stress test. It is vital to start monitoring the moment the client recognizes a fetal movement. The NST recognizes the coupling of fetal neurological status to cardiovascular reflex responses. It is one of the factors that tends to disappear earliest during progressive fetal compromise.

59. Arvic who is diagnosed with diabetes mellitus type 1 displays symptoms of hypoglycemia. Which of the following actions should the nurse instruct the parents?

A. Give the child honey (simple sugar)

B. Give the child milk (complex sugar).

C. Contact the healthcare provider before doing anything.

D. Give the child nothing by mouth.

Correct Answer: A. Give the child honey (simple sugar).

Immediate action is important. Therefore, providing little sugar temporarily corrects low serum glucose levels. Simple sugar is preferred because it is converted to glucose more quickly than complex sugar. A child with hyperglycemia needs fluid to prevent dehydration. Patients should be advised to wear a medical alert bracelet and to carry a glucose source like gel, candy, or tablets on their person in case symptoms arise.

- **Option B:** Because complex sugars, such as milk, are absorbed more slowly, they do not provide an immediate response. For patients unable to take oral agents, a 1-mg intramuscular (IM) injection of glucagon can be administered. Once the patient is more awake, a complex carbohydrate food source should be given to the patient to achieve sustained euglycemia.
  Option C: Contacting the healthcare provider wastes valuable time during which emergency measures could be started to raise the child's glucose level. Nonpharmacological management of recurrent hypoglycemia involves patient education and lifestyle changes. Some patients are unaware of the serious ramifications of persistent hypoglycemia. As such, patients should be educated on the importance of routine blood glucose monitoring as well as on the identification of the individual's symptoms of hypoglycemia.

- **Option D:** Prompt action is required to prevent complications of hypoglycemia. Glycemic control has been an important aspect of medical management due to the association between glycated hemoglobin levels and cardiovascular events in diabetes mellitus type 1 patients.

60. Nurse Myrna develops a counter-transference reaction. This is evidenced by:

A. Revealing personal information to the client.

B. Focusing on the feelings of the client.

C. Confronting the client about discrepancies in verbal or nonverbal behavior.

D. The client feels angry towards the nurse who resembles his mother.

Correct Answer: A. Revealing personal information to the client

Counter-transference is an emotional reaction of the nurse on the client based on her unconscious needs and conflicts. Countertransference is defined as redirection of a psychotherapist's feelings toward a client – or, more generally, as a therapist's emotional entanglement with a client. Just as transference is the concept of a client redirecting feelings meant for others onto the therapist, countertransference is the reaction to a client's transference, in which the counselor projects his or her feelings unconsciously onto the client. How countertransference is used in therapy can make it either helpful or problematic.

- **Option B:** It is important for the therapist to understand the role that of transference and countertransference, and deal with those emotions in such a way that the core of the counseling relationship is not shattered by these feelings. Once countertransference is recognized, it is important that the therapist acknowledge and work through those feelings.
- **Option C:** This is a therapeutic approach. The idea of countertransference — the counselor's unconscious feelings that emerge as a result of working with the client — is most often attributed to Sigmund Freud, who was the first to name the phenomenon and caution other analysts to manage it within themselves. Some suggest that categorizing countertransference as part of the "psychodynamic approach" has made its understanding more difficult, particularly with the rise of other counseling styles that may not emphasize self-awareness and exploration.
- **Option D:** This is a transference reaction where a client has an emotional reaction towards the nurse based on her past. Signs of countertransference in therapy can include a variety of behaviors, including excessive self-disclosure on the part of the therapist or an inappropriate interest in irrelevant details from the life of the person in treatment. A therapist who acts on their feelings toward the person being treated or that person's situation or engages in behavior not appropriate to the treatment process may not be effectively managing countertransference.

61. Which statements are part of the criteria used to judge the soundness of a stated research question? Select all that apply.

A. A relationship between two or more variables.

B. An operational definition of each variable.

C. The nature of the population being tested.

D. The possibility of empirical testing.

E. A guiding framework for research.

Correct Answers: A, C, D, E

A research question is a question that a study or research project aims to answer. This question often addresses an issue or a problem, which, through analysis and interpretation of data, is answered in the study's conclusion.

- **Option A:** Moreover, the research question has a domino effect on the rest of the study. These questions influence factors, such as the research methodology, sample size, data collection, and data analysis (Lipowski, 2008).
- **Option B:** The primary importance of framing the research question is that it narrows down a broad topic of interest into a specific area of study (Creswell, 2014). Research questions can be classified into different categories, depending on the type of research to be done.
- **Option C:** In most studies, the research question is written so that it outlines various aspects of the study, including the population and variables to be studied and the problem the study addresses.
- **Option D:** As their name implies, research questions are often grounded on research. As a result, these questions are dynamic; this means researchers can change or refine the research question as they review related literature and develop a framework for the study.
- **Option E:** Research questions, along with hypotheses, also serve as a guiding framework for research. These questions also specifically reveal the boundaries of the study, setting its limits, and ensuring cohesion.

62. Meningitis occurs as an extension of a variety of bacterial infections due to which of the following conditions?

A. Congenital anatomic abnormality of the meninges.

B. Lack of acquired resistance to the various etiologic organisms.

C. Occlusion or narrowing of the CSF pathway.

D. Natural affinity of the CNS to certain pathogens.

Correct Answer: B. Lack of acquired resistance to the various etiologic organisms.

Extension of a variety of bacterial infections is a major causative factor of meningitis and occurs as a result of a lack of acquired resistance to the etiologic organisms. Preexisting CNS anomalies are factors that contribute to susceptibility. Meningitis can be caused by infectious and non-infectious processes (autoimmune disorders, cancer/paraneoplastic syndromes, drug reactions). The infectious etiologic agents of meningitis include bacteria, viruses, fungi, and less commonly parasites.

- **Option A:** The most common viral agents of meningitis are non-polio enteroviruses (group b coxsackievirus and echovirus). Other viral causes: mumps, Parechovirus, Herpesviruses (including Epstein Barr virus, Herpes simplex virus, and Varicella-zoster virus), measles, influenza, and arboviruses (West Nile, La Crosse, Powassan, Jamestown Canyon).
- **Option C:** Organisms can enter the cerebrospinal fluid (CSF) via neighboring anatomic structures (otitis media, sinusitis), foreign objects (medical devices, penetrating trauma), or during operative procedures. Viruses can penetrate the central nervous system (CNS) via retrograde transmission along neuronal pathways or by hematogenous seeding.
- **Option D:** Bacteria colonize the nasopharynx and enter the bloodstream after mucosal invasion. Upon making their way to the subarachnoid space, the bacteria cross the blood-brain barrier, causing a direct inflammatory and immune-mediated reaction.

63. Niklaus was born with hypospadias; which of the following should be avoided when a child has such condition?

A. Surgery

B. Circumcision

C. Intravenous pyelography (IVP)

D. Catheterization

Correct Answer: B. Circumcision

Hypospadias refers to a condition in which the urethral opening is located below the glans penis or anywhere along the ventral surface (underside) of the penile shaft. The ventral foreskin is lacking, and the distal portion gives an appearance of a hood. Early recognition is important so that circumcision is avoided; the foreskin is used for surgical repair.

- **Option A:** Surgery is the procedure of choice to improve the child's ability to stand when urinating, improve the appearance of the penis, and preserve sexual adequacy. Patients diagnosed with hypospadias should be referred for surgical evaluation within the first weeks of life. If parents want circumcisions for their newborns, the presence of any penile abnormality should contraindicate the procedure, given that the foreskin is used in arthroplasties.
- **Option C:** IVP is contraindicated if the child has an allergy to iodine or shellfish. Intravenous pyelography (IVP), or intravenous urography, is a diagnostic test that involves the administration of intravenous contrast and X-ray imaging of the urinary tract.
- **Option D:** Catheterization may be used to ensure urinary elimination. Hypospadias is the most frequent anatomical variant of the penis and occurs during development when hormonal triggers malfunction and the urethra does not properly tubularize. The urethral meatus can be found anywhere along the glans, penile shaft, scrotum, or perineum, leading to a difficult catheterization.

64. Nausea and vomiting is an expected side effect of chemotherapeutic drug use. Which of the following drugs should be administered to a client on chemotherapy to prevent nausea and vomiting?

A. Myleran (busulfan)

B. Chemet (succimer)

C. Arimidex (anastrozole)

D. Metozol (metoclopramide)

Correct Answer: D. Metozol (metoclopramide)

- **Option D:** Metoclopramide (Metozol) – an antiemetic is used before chemotherapy to prevent nausea and vomiting.
- **Option A:** Busulfan (Myleran) – alkylating agent that works by sticking to one of the DNA strands of the cancer cells. It works also by inhibiting the growth of cancer cells.
- **Option B:** Succimer (Chemet) – chelating agent for lead poisoning.
- **Option C:** Anastrozole (Arimidex) – hormone regulator that slows or inhibits the growth of certain types of breast cancer cells that requires estrogen to grow.

65. A client presents to the emergency room with dyspnea, chest pain, and syncope. The nurse assesses the client and notes that the following assessment cues: pale, diaphoretic, blood pressure of 90/60, respirations of 33. The client is also anxious and fearing death. Which action should the nurse take first?

A. Administer pain medications

B. Administer IV fluids

C. Administer dopamine

D. Administer oxygen via nasal cannula

Correct Answer: D. Administer oxygen via nasal cannula.

The promotion of adequate oxygenation is the most vital to life and therefore should be given the highest priority by the nurse. When the nurse needs to prioritize patients, Maslow's hierarchy of needs theory is used to decide which patient is to be seen first. A part of Maslow's hierarchy of needs is airway, breathing, and circulation (ABC), which are physiological elements that are needed for the body to survive and help determine one's level of health.

- **Option A:** The 2nd priority needs include MAAUAR which is mental status, acute pain, acute impaired urinary elimination, unresolved and unaddressed needs, abnormal diagnostic test results, and risks. The 3rd level priorities include all concerns and problems addressed with the 2nd level priority needs.
- **Option B:** Maslow's Hierarchy of Needs identifies the physiological or biological needs, including the ABCs, the safety/psychological/emotional needs, the need for love and belonging, the needs for self-esteem and the esteem by others and the self-actualization needs in that order of priority. Administering IV fluids belong in Maslow's physical and biological needs, but still after airway.
- **Option C:** Dopamine (DA) is a peripheral vaso stimulant used to treat low blood pressure, low heart rate, and cardiac arrest, especially in acute neonatal cases via a continuous intravenous drip. For stimulation of the sympathetic nervous system, the indication is for a continuous intravenous drip administration.

66. Mr. Gonzales was admitted to the hospital with ascites and jaundice. To rule out cirrhosis of the liver which laboratory test indicates liver cirrhosis?

A. Decreased red blood cell count

B. Decreased serum acid phosphatase level

C. Elevated white blood cell count

D. Elevated serum aminotransferase

Correct Answer: D. Elevated serum aminotransferase

Hepatic cell death causes the release of liver enzymes alanine aminotransferase (ALT), aspartate aminotransferase (AST), and lactate dehydrogenase (LDH) into the circulation. Liver cirrhosis is a chronic and irreversible disease of the liver characterized by generalized inflammation and fibrosis of the liver tissues.

- **Option A:** Decreased red blood cell count may indicate anemia.

- **Option B:** Serum acid phosphatase is an enzyme that acts to liberate phosphate under acidic conditions. Until now, low values cannot be determined with certainty.
- **Option C:** A high white blood cell count usually indicates increased production of white blood cells to fight infection.

67. Situation: A widow age 28, whose husband died one (1) year ago due to AIDS, has just been told that she has AIDS. Panky says to the nurse, "Why me? How could God do this to me?" This reaction is one of:

A. Depression

B. Denial

C. Anger

D. Bargaining

Correct Answer: C. Anger

Anger is experienced as reality sets in. This may either be directed to God, the deceased, or displaced on others. It is common to experience anger after the loss of a loved one. We are trying to adjust to a new reality and we are likely experiencing extreme emotional discomfort. There is so much to process that anger may feel like it allows us an emotional outlet.

- **Option A:** Depression is a painful stage where the individual mourns for what was lost. We start to feel the loss of our loved one more abundantly. As our panic begins to subside, the emotional fog begins to clear and the loss feels more present and unavoidable.
- **Option B:** Denial is the first stage of the grieving process evidenced by the statement "No, it can't be true." The individual does not acknowledge that the loss has occurred to protect self from the psychological pain of the loss. The first stage in this theory, denial helps us minimize the overwhelming pain of loss. As we process the reality of our loss, we are also trying to survive emotional pain. It can be hard to believe we have lost an important person in our lives, especially when we may have just spoken with this person the previous week or even the previous day.
- **Option D:** In bargaining the individual holds out hope for additional alternatives to forestall the loss, evidenced by the statement "If only…" When coping with loss, it isn't unusual to feel so desperate that you are willing to do almost anything to alleviate or minimize the pain. Losing a loved one can cause us to consider any way we can avoid the current pain or the pain we are anticipating from loss. There are many ways we may try to bargain.

68. Nurse Michelle should know that the drainage is normal four (4) days after a sigmoid colostomy when the stool is:

A. Green liquid

B. Solid formed

C. Loose, bloody

D. Semiformed

Correct Answer: C. Loose, bloody

Normal bowel function and soft-formed stool usually do not occur until around the seventh day following surgery. The stool consistency is related to how much water is being absorbed.

- **Option A:** Food, medicines, and other things ingested can affect the consistency or color of the stool.
- **Option B:** A formed stool may occur a week after the surgery.
- **Option D:** The stool from a colostomy can be thin or thick liquid, or semiformed.

69. A client with a diagnosis of borderline personality disorder has negative feelings toward the other clients on the unit and considers them all to be "bad." The nurse understands this defense is known as:

A. Splitting

B. Ambivalence

C. Passive aggression

D. Reaction formation

Correct Answer: A. Splitting

Splitting is the compartmentalization of opposite-affect states and failure to integrate the positive and negative aspects of self or others. Splitting is a term used in psychiatry to describe the inability to hold opposing thoughts, feelings, or beliefs. Some might say that a person who splits sees the world in terms of black or white—all or nothing. It's a distorted way of thinking in which the positive or negative attributes of a person or event are neither weighed nor cohesive.

- **Option B:** The simultaneous existence of contradictory feelings and attitudes, such as pleasantness and unpleasantness or friendliness and hostility, toward the same person, object, event, or situation. Eugen Bleuler, who first defined ambivalence in a psychological sense and referred to it as affective ambivalence, regarded extreme ambivalence, such as an individual expressing great love for his or her mother while also asking how to kill her, as a major symptom of schizophrenia.
- **Option C:** Passive-aggressive behaviors are those that involve acting indirectly aggressive rather than directly aggressive. Passive-aggressive people regularly exhibit resistance to requests or demands from family and other individuals often by procrastinating, expressing sullenness, or acting stubborn.
- **Option D:** Reaction formation is a psychological defense mechanism in which a person goes beyond denial and behaves in the opposite way to which he or she thinks or feels. Conscious behaviors are adopted to overcompensate for the anxiety a person feels regarding their socially unacceptable unconscious thoughts or emotions. Usually, a reaction formation is marked by exaggerated behavior, such as showiness and compulsiveness.

70. A nurse is monitoring a new mother in the PP period for signs of hemorrhage. Which of the following signs, if noted in the mother, would be an early sign of excessive blood loss?

A. A temperature of 100.4°F.

B. An increase in the pulse from 88 to 102 BPM.

C. An increase in the respiratory rate from 18 to 22 breaths per minute.

D. Blood pressure changes from 130/88 to 124/80 mm Hg.

Correct Answer: B. An increase in the pulse from 88 to 102 BPM.

During the 4th stage of labor, the maternal blood pressure, pulse, and respiration should be checked every 15 minutes during the first hour. A rising pulse is an early sign of excessive blood loss because the heart pumps faster to compensate for reduced blood volume.

- **Option A:** A slight rise in temperature is normal. Patients may also have signs and symptoms of shock, such as confusion, blurry vision, clammy skin, and weakness.
- **Option C:** The respiratory rate has increased slightly. The patient may also have an increased heart rate, an increased respiratory rate, and feeling faint while standing up.
- **Option D:** The blood pressure will fall as the blood volume diminishes, but a decreased blood pressure would not be the earliest sign of hemorrhage. As the patient continues to lose blood, they may also feel cold, have decreased blood pressure, and may lose consciousness.

71. A client has a history of chronic renal failure and received hemodialysis treatments three times per week through an arteriovenous (AV) fistula in the left arm. Which of the following interventions is included in this client's plan of care?

A. Keep the AV fistula site dry.

B. Keep the AV fistula wrapped in gauze.

C. Take the blood pressure in the left arm.

D. Assess the AV fistula for a bruit and thrill.

Correct Answer: D. Assess the AV fistula for a bruit and thrill.

Assessment of the AV fistula for bruit and thrill is important because, if not present, it indicates a non-functioning fistula. Thrill is caused by turbulence of high-pressure arterial blood flow entering a low-pressure venous system and should be palpable above the venous exit site. Bruit is the sound caused by the turbulence of arterial blood entering the venous system and should be audible by stethoscope, although may be very faint.

- **Option A:** When not being dialyzed, the AV fistula site may get wet. Avoid contamination of the access site. Use aseptic technique and masks when giving shunt care, applying or changing dressings, and when starting or completing dialysis process. Prevents the introduction of organisms that can cause infection.
- **Option B:** Immediately after a dialysis treatment, the access site is covered with adhesive bandages. Assess skin around vascular access, noting redness, swelling, local warmth, exudate, tenderness. Signs of local infection, which can progress to sepsis if untreated.
- **Option C:** No blood pressures or venipunctures should be taken in the arm with the AV fistula. Avoid trauma to shunt. Handle tubing gently, maintain cannula alignment. Limit activity of extremity. Avoid taking BP or drawing blood samples in shunt extremity. Instruct the patient not to sleep on side with shunt or carry packages, books, purse on affected extremity.

72. A client is to take one daily dose of ranitidine (Zantac) at home to treat her peptic ulcer. The nurse knows that the client understands proper drug administration of ranitidine when she says that she will take the drug at which of the following times?

A. Before meals

B. With meals

C. At bedtime

D. When pain occurs

Correct Answer: C. At bedtime

Ranitidine blocks the secretion of hydrochloric acid. Clients who take only one daily dose of ranitidine are usually advised to take it at bedtime to inhibit the nocturnal secretion of acid. Clients who take the drug twice a day are advised to take it in the morning and at bedtime. Ranitidine's acid-lowering effect is more pronounced for basal and nocturnal acid secretion than it is for food-stimulated acid secretion.

- **Option A:** Ranitidine is available as tablets, capsules, or oral syrup. Ranitidine solution or the dissolved tablet may be mixed with select enteral tube feeding solutions. When dosed orally, ranitidine has a bioavailability of 50%, which is relatively unaffected by food. The peak levels occur 2 to 3 hours post-administration for oral administration and occur 15 minutes after intramuscular administration.
- **Option B:** Ranitidine is a competitive inhibitor of histamine H2-receptors. The reversible inhibition of the H2-receptors in gastric parietal cells results in a reduction in both gastric acid volume and concentration. Ranitidine is primarily excreted unchanged in the urine, with a half-life ranging from 2.5 to 3 hours, and because of the renal elimination, the half-life may increase to 4 to 5 hours in patients with kidney dysfunction.
- **Option D:** Clinicians urge patients to seek professional medical care and contraindicate the over-the-counter product when they have difficulty or pain when swallowing food or have blood in vomit or stool. Concurrent use is contraindicated with other acid reducers, kidney disease, or in patients younger than 12 years old.

73. Which organization's standards require that all patients be assessed specifically for pain?

A. American Nurses Association (ANA)

B. State nurse practice acts

C. National Council of State Boards of Nursing (NCSBN)

D. The Joint Commission

Correct Answer: D. The Joint Commission

The Joint Commission has developed assessment standards, including that all clients be assessed for pain.

- **Option A:** The ANA has developed standards for clinical practice, including those for assessment, but not specifically for pain. The American Nurses Association (ANA) is the premier organization representing the interests of the nation's 4 million registered nurses. ANA is at the forefront of improving the quality of health care for all. Founded in 1896, and with members in all 50 states and

U.S. territories, ANA is the strongest voice for the profession.

- **Option B:** State nurse practice acts regulate nursing practice in individual states. An NPA is enacted by state legislation and its purpose is to govern and guide nursing practice within that state. An NPA is actually a law and must be adhered to as law. Each state has a Board of Nursing (BON) that interprets and enforces the rules of the NPA.
- **Option C:** The NCSBN asserts that the scope of nursing includes a comprehensive assessment but does not specifically include pain. National Council of State Boards of Nursing (NCSBN) is an independent, not-for-profit organization through which nursing regulatory bodies act and counsel together on matters of common interest and concern affecting public health, safety, and welfare, including the development of nursing licensure examinations.

74. All of the following are crucial needs of the dying client except:

A. Control of pain

B. Preservation of dignity and self-worth

C. Love and belonging

D. Freedom from decision making

Correct Answer: D. Freedom from decision making

Patients should be made aware that they can participate in their end-of-life care in two distinct ways: by actively making decisions at the end of their life and by making decisions about how they believe they would wish to be cared for based on a hypothetical scenario of impairment. The patient should understand that while his or her health care provider may strongly disagree with or object to the patient's decision to refuse the plan of care, the patient's decision is constitutionally protected.

- **Option A:** Health care professionals should understand that personal, social, and cultural experiences influence a patient's definition of pain, health, and illness, and responses to pain vary among individuals and cultural groups.3 A patient's reaction to pain is influenced by his or her individual perception of it, and the perception of pain reflects his or her attitude toward pain and characteristic way of responding.
- **Option B:** Two key factors which influence the preservation of dignity at the end of life are promoting self-respect and treating the patient with respect; but how are these translated in practice into palliative care? Most end-of-life interventions focus predominantly on symptom control, rather than holistic care. Therefore it may be helpful to consider the physical, emotional, and spiritual needs of patients in palliative care settings.
- **Option C:** Regarding emotional needs, a review found that important actions for healthcare professionals providing end-of-life care include communicating, listening, conveying empathy, and involving patients in decision-making 8. Furthermore, good communication between the patient and their partner about their feelings should be promoted.

75. While inserting a nasogastric tube, the nurse should use which of the following protective measures?

A. Gloves, gown, goggles, and surgical cap

B. Sterile gloves, mask, plastic bags, and gown

C. Gloves, gown, mask, and goggles

D. Double gloves, goggles, mask, and surgical cap

Correct Answer: C. Gloves, gown, mask, and goggles

Gloves, gown, mask, and goggles should be used as a universal precaution on all patients to prevent skin and mucous membrane exposure when contact with blood or other body fluids is anticipated. The potential for contact with a patient's blood/body fluids while starting an NG is present and increases with the inexperience of the operator. Gloves must be worn while starting an NG; and if the risk of vomiting is high, the operator should consider face and eye protection as well as a gown. Trauma protocol calls for all team members to wear gloves, face and eye protection, and gowns.

- **Option A:** Surgical caps offer protection to hair but aren't required. Surgical caps are a part of medical protective clothing and should prevent germs from the hair or scalp of surgical personnel from contaminating the operating area.
- **Option B:** Plastic bags provide no direct protection and are not part of universal precautions. Personal protective equipment serves as a barrier to protect the skin, mucous membranes, airway, and clothing. It includes gowns, gloves, masks, and face shields or goggles.
- **Option D:** It is also unnecessary to double gloves. Double gloving reduces the amount of contact with the patient's blood and is also effective at reducing the level of exposure to infectious material during needle stick injury. Double gloving also reduces the risk of perforation compared to single gloving.

76. A nurse is caring for a client with a history of overdosage of aspirin. The nurse suspects which of the following can be an early sign of aspirin toxicity?

A. Unsteady gait

B. Drowsiness

C. Confusion

D. Tinnitus

Correct Answer: D. Tinnitus

Acute ingestion of less than 150 mg/kg can result in severe toxicity. The earliest symptoms of acute aspirin poisoning may include ringing in the ears (tinnitus) and impaired hearing.

- **Options A, B, & C:** These are the late signs of aspirin poisoning.

77. Forty-eight hours after delivery, the nurse in charge plans discharge teaching for the client about infant care. By this time, the nurse expects that the phase of postpartum psychological adaptation that the client would be in would be termed which of the following?

A. Taking in

B. Letting go

C. Taking hold

D. Resolution

Correct Answer: C. Taking hold

Beginning after completion of the taking-in phase, the taking-hold phase lasts about 10 days. During this phase, the client is concerned with her need to resume control of all facets of her life in a competent manner. At this time, she is ready to learn self-care and infant care skills.

- **Option A:** The taking-in phase usually sets 1 to 2 days after delivery. The woman prefers to talk about her experiences during labor and birth and also her pregnancy. The taking-in phase provides time for the woman to regain her physical strength and organize her rambling thoughts about her new role.
- **Option B:** During the letting go phase, the woman finally accepts her new role and gives up her old roles like being a childless woman or just mother of one child.
- **Option D:** The resolution phase or ending phase is the final stage of the nurse-client relationship. After the client's problems or issues are addressed, the relationship needs to be completed before it can be terminated.

78. A male adult client voluntarily admits himself to the substance abuse unit. He confesses that he drinks one (1) qt or more of vodka each day and uses cocaine occasionally. Later that afternoon, he begins to show signs of alcohol withdrawal. What are some early signs of this condition?

A. Vomiting, diarrhea, and bradycardia

B. Dehydration, temperature above 101° F (38.3° C), and pruritus

C. Hypertension, diaphoresis, and seizures

D. Diaphoresis, tremors, and nervousness

Correct Answer: D. Diaphoresis, tremors, and nervousness

Alcohol withdrawal syndrome includes alcohol withdrawal, alcoholic hallucinosis, and alcohol withdrawal delirium (formerly delirium tremens). Signs of alcohol withdrawal include diaphoresis, tremors, nervousness, nausea, vomiting, malaise, increased blood pressure and pulse rate, sleep disturbance, and irritability.

- **Option A:** Although diarrhea may be an early sign of alcohol withdrawal, tachycardia — not bradycardia — is associated with alcohol withdrawal. Alcohol withdrawal symptoms occur when patients stop drinking or significantly decrease their alcohol intake after long-term dependence. Withdrawal has a broad range of symptoms from mild tremors to a condition called delirium tremens, which results in seizures and could progress to death if not recognized and treated promptly.
- **Option B:** Dehydration and an elevated temperature may be expected, but a temperature above 101° F indicates an infection rather than alcohol withdrawal. Pruritus rarely occurs in alcohol withdrawal. Alcohol withdrawal can range from very mild symptoms to the severe form, which is named delirium tremens. The hallmark is autonomic dysfunction resulting from the excitation of the central nervous system. Mild signs/symptoms can arise within six hours of alcohol cessation. If symptoms do not progress to more severe symptoms within 24 to 48 hours, the patient will likely recover.
- **Option C:** If withdrawal symptoms remain untreated, seizures may arise later. Withdrawal seizures can typically be managed with benzodiazepines as well, but may require adjunct therapy with phenytoin, barbiturates, and may even require intubation and sedation with propofol (Diprivan), ketamine (Ketalar), or in the most severe cases dexmedetomidine (Precedex).

79. You're preparing a teaching plan for a 27 y.o. named Jeff who underwent surgery to close a temporary ileostomy. Which nutritional guidelines do you include in this plan?

A. There is no need to change eating habits.

B. Eat six small meals a day.

C. Eat the largest meal in the evening.

D. Restrict fluid intake.

Correct Answer: B. Eat six small meals a day.

To avoid overloading the small intestine, encourage the patient to eat six small, regularly spaced meals. An ileostomy closure surgery is done to reverse the ileostomy so the client can have bowel movements as he did before the surgery. Ileostomy closure surgery is usually done through the stoma.

- **Option A:** The patient should eat 5 to 6 small meals throughout the day. He should remember to eat slowly and chew his food well. It's important the patient tries to maintain his weight. After surgery, foods may affect the patient differently. Certain foods may make him have bowel movements right after he eats them.
- **Option C:** Certain foods may cause diarrhea (loose or watery bowel movements). The patient may need to change his diet after surgery. During the first few months after the surgery, the patient will need to test foods and see how he reacts to them. It may be helpful to keep a food diary. This will help keep track of which foods cause discomfort.
- **Option D:** The patient should drink 8 to 10 (8-ounce) glasses of liquids every day. The amount of alcohol the patient drinks can affect him during and after the surgery. If the patient stops drinking alcohol suddenly, it can cause seizures, delirium, and death.

80. In a quaint rural town nestled amidst sprawling meadows, there resides a small yet well-equipped community healthcare facility. It's a serene spring morning when Nurse Abigail receives a call regarding the impending admission of an 8-year-old boy, Oliver. Oliver had been suffering from a sore throat about two weeks ago, which seemed to resolve spontaneously. However, over the past few days, he has been feeling progressively fatigued, and his mother noticed puffiness around his eyes and swollen ankles. As the day unfolds, Oliver, accompanied by his apprehensive parents, arrives at the healthcare facility. The chief physician, Dr. Mitchell, after a preliminary examination, suspects acute glomerulonephritis (AGN) given the child's recent history of a throat infection and current symptoms. He decides to orchestrate a battery of investigations to ascertain the diagnosis. Nurse Abigail, poised and diligent, sets forth to educate Oliver's parents about the possible etiology of AGN while awaiting the investigative results. She elaborates on certain conditions and infections that could potentially culminate in AGN, hoping to provide the distressed parents with some context regarding their child's ailment. Dr. Mitchell, keen on enriching the clinical acumen of his medical team, gathers his young resident physicians and nurses, including Nurse Abigail, for a teaching session. He propounds the following question to incite a discussion on the common antecedents of AGN, focusing on identifying the most common cause:

Which of the following conditions most commonly causes acute glomerulonephritis?

A. A congenital condition leading to renal dysfunction

B. Prior infection with group A Streptococcus within the past 10-14 days

C. Viral infection of the glomeruli

D. Nephrotic syndrome

E. Systemic Lupus Erythematosus (SLE)

F. IgA Nephropathy (Berger's Disease)

G. Uncontrolled Hypertension

Correct Answer: B. Prior infection with group A Streptococcus within the past 10-14 days.
Acute post-streptococcal glomerulonephritis (APSGN) is a well-recognized sequelae to a prior group A Streptococcus infection, typically occurring within 10-14 days post-infection, making it the most common cause among the listed options.

- **Option A:** A congenital condition may lead to chronic renal dysfunction, but it's not a common cause of acute glomerulonephritis.
- **Option C:** Viral infections can contribute to glomerular diseases, however, they are not as co
- **Option D:** Nephrotic syndrome is a consequence of various glomerular diseases rather than a cause of acute glomerulonephritis.
- **Option E:** Systemic Lupus Erythematosus (SLE) can lead to lupus nephritis, which is a form of glomerulonephritis, but it's not as common a cause as group A Streptococcus infection.
- **Option F:** IgA Nephropathy (Berger's Disease) is a type of glomerulonephritis but not the most common cause when compared to APSGN.
- **Option G:** Uncontrolled hypertension can cause renal damage over time, but it's not a typical cause of acute glomerulonephritis in the context provided.

81. A client with catatonic schizophrenia is mute, can't perform activities of daily living, and stares out the window for hours. What is the nurse's first priority?

A. Assist the client with feeding

B. Assist the client with showering

C. Reassure the client about safety

D. Encourage socialization with peers

Correct Answer: A. Assist the client with feeding

According to Maslow's hierarchy of needs, the need for food is among the most important. The initial management includes supportive measures such as IV fluids and even nasogastric tubes given that patients with catatonia are susceptible to malnutrition, dehydration, pneumonia, etc. The key is early identification of catatonia in a patient with schizophrenia and initiation of treatment.

- **Option B:** Catatonia again is a complex combination of psychomotor abnormalities and mood and thought processes. There are at least forty different signs and symptoms that have been

associated with catatonia. The Diagnostic and Statistical Manual V has criteria for catatonia with specifiers, including that for schizophrenia.

- **Option C:** Features of catatonia had been described since the 1800s with prominent physicians such as Kahlbaum and even Kraepelin, who defined catatonia within the larger definition of dementia praecox.[2] There are several theories behind the same as catatonia can be part of a larger psychiatric or neurological illness. Kahlbaum has ultimately been credited with the understanding that symptoms such as stupor and catalepsy were part of a larger syndrome of psychomotor abnormalities, which he termed as “catatonia.” This can be a part of a larger schizophrenic illness or even a bipolar affective illness or medical illness.
- **Option D:** Other needs, in order of decreasing importance, include hygiene, safety, and a sense of belonging. The epidemiology of catatonic schizophrenia can be multivariate. It is said that about 10% of patients in psychiatric inpatient services have catatonic features.[7] On the one hand, the older school of psychiatry associated schizophrenia with catatonia, while newer epidemiological studies show that 20% of patients with catatonia have schizophrenia, and about 45% have symptoms of mood disorders and medical illness.

82. Which of the following complications of gastric resection should the nurse teach the client to watch for?

A. Constipation

B. Dumping syndrome

C. Gastric spasm

D. Intestinal spasms

Correct Answer: B. Dumping syndrome

Dumping syndrome is a problem that occurs postprandially after gastric resection because ingested food rapidly enters the jejunum without proper mixing and without the normal duodenal digestive processing. Dumping syndrome is treated primarily by diet modification, medical treatment with somatostatin analogs, or surgical intervention for refractory cases.

- **Option A:** Diarrhea, not constipation, may also be a symptom. The most common post-gastrectomy complications following gastric resection include nutritional deficiencies, dumping syndrome, small gastric remnant, post-vagotomy diarrhea, delayed gastric emptying, afferent or efferent loop syndrome, roux stasis, and bile reflux gastritis.
- **Option C:** Gastric spasms don’t occur, but antispasmodics may be given to slow gastric emptying. Internal hernias are a known cause of acute abdominal pain in patients with gastric resection and Roux-en-Y reconstruction. Three types of trans-mesenteric hernias commonly occur in these patients.
- **Option D:** Intestinal spasms don’t occur, but antispasmodics may be given to slow gastric emptying. Afferent and Efferent Loop Syndromes are well-established complications of gastric resection. Afferent loop syndrome is an uncommon obstruction that may result from the internal hernia, marginal ulceration, adhesions, recurrent cancer, or intussusception in patients with Billroth II gastrectomy.

83. For which time period would the nurse notify the health care provider that the client had no bowel sounds?

A. 2 minutes

B. 3 minutes

C. 4 minutes

D. 5 minutes

Correct Answer: D. 5 minutes

To completely determine that bowel sounds are absent, the nurse must auscultate each of the four quadrants for at least 5 minutes; 2, 3, or 4 minutes is too short a period to arrive at this conclusion. The first item to listen for is the presence of bowel sounds. To chart an assessment finding of no bowel sounds, the nurse needs to listen over the quadrant for at least five minutes. The nurse should also do the auscultation before palpation and percussion to avoid influencing bowel sounds.

- **Option A:** In most cases, bowel sounds are present, but the nurse needs to categorize them. She should listen for the intensity of the sound – whether it is soft or strong. The nurse should also listen for frequency. Hypoactive bowel sounds could indicate a problem, so if the nurse is having trouble hearing them, this is significant.
- **Option B:** Auscultating bowel sounds can allow the nurse to pinpoint areas where an obstruction may have occurred. Finding no bowel sounds can mean an ileus or obstruction above that area of the intestine.
- **Option C:** Hypoactive bowel sounds are considered as one every three to five minutes, and this can indicate diarrhea, anxiety, or gastroenteritis. Hyperactive bowel sounds are often found before a blockage. It is quite common to find one quadrant with hyperactive bowel sounds and one with none or hypoactive ones.

84. The nurse in charge is evaluating the infection control procedures on the unit. Which finding indicates a break in technique and the need for education of staff?

A. The nurse puts on a mask, a gown, and gloves before entering the room of a client in strict isolation.

B. A nurse with open, weeping lesions of the hands puts on gloves before giving direct client care.

C. The nurse aide is not wearing gloves when feeding an elderly client.

D. A client with active tuberculosis is asked to wear a mask when he leaves his room to go to another department for testing.

Correct Answer: B. A nurse with open, weeping lesions of the hands puts on gloves before giving direct client care.

Persons with exudative lesions or weeping dermatitis should not give direct client care or handle client-care equipment until the condition resolves. Strict isolation requires the use of a mask, gown, and gloves. Personnel involved in treating high-risk infections should be specialized in isolation work and be healthy, not immunosuppressed, and if possible should be vaccinated, if a vaccine is available.

- **Option A:** Strict isolation refers to suspected highly infectious and transmissible virulent and pathogenic microbes, highly resistant bacterial strains and agents that are not accepted in any form of distribution in the society or in the environment. Patients in need of strict isolation should be placed in a separate isolation ward or building.
- **Option C:** There is no need to wear gloves when feeding a client. However, universal precautions (treating all blood and body fluids as if they are infectious) should be observed in all situations.

- **Option D:** A client with active tuberculosis should be on respiratory precautions. Airborne precautions are used in addition to standard precautions to prevent disease transmission from individuals known or suspected to have diseases spread by fine particles, including, TB.

85. Nurse Susan administered intravenous gamma globulin to an 18 month-old child with AIDS. The parent asks why this medication is being given. What is the nurse's best response?

A. "It will slow down the replication of the virus."

B. "This medication will improve your child's overall health status."

C. "This medication is used to prevent bacterial infections."

D. "It will increase the effectiveness of the other medications your child receives."

Correct Answer: C. "This medication is used to prevent bacterial infections."

Intravenous gamma globulin is given to help prevent as well as to fight bacterial infections in young children with AIDS. Gamma globulin injections seem to lower the number of certain infections among children with AIDS but do not cure the lethal ailment.

- **Option A:** The main immunological abnormality in human immunodeficiency virus (HIV)-infected patients, and particularly those with the acquired immune deficiency syndrome (AIDS), is a deficiency in cellular immunity. However, symptomatic HIV-infected children also have evidence of deficiency of specific antibody synthesis, and intravenous immune globulin (IVIG) preparations in doses of 0.2-0.4 g/kg every 2-4 weeks have been shown to reduce the incidence of respiratory infections.
- **Option B:** IVIG therapy may also reduce the mortality and incidence of bacterial infections in adults but further studies are required. In addition, high-dose IVIG therapy (1-2 g/kg over 2-5 days) produces increased platelet counts in patients with idiopathic thrombocytopenic purpura (ITP) associated with HIV infection. Finally, IVIG therapy may have a role in HIV-infected patients suffering from severe parvovirus B19 or measles infection, or in patients suffering from autoimmune disorders where high-dose IVIG therapy has been shown to be efficacious.
- **Option C:** Doctors said that although the gamma globulin treatment did not cure AIDS it seemed to "enhance the quality" the lives of the children in the study group because it freed them from the constant infections that added to their suffering. Such episodes of sepsis are often a result of bacterial infection. The gamma globulin contains antibodies to many common bacteria, including ones that often kill children whose immune systems have been paralyzed by the AIDS virus.