

Kevin's Review - 100 NCLEX Practice Questions

1. A client is prescribed with guaifenesin (Mucinex). The nurse determines that the client understands the proper administration of this medication if the client states that he or she will:

- A. Limit oral fluid intake
- B. Take the medication with meals only
- C. Take an additional dose once fever and cough persist
- D. Drink extra fluids while taking this medication

Correct Answer: D. Drink extra fluids while taking this medication

Guaifenesin is an expectorant. Drink extra fluids to help loosen the congestion and lubricate the throat while taking this medication.

- **Option A:** Fluids are needed to loosen the secretions.
- **Option B:** The medication does not have to be taken with meals.
- **Option C:** Additional doses should not be taken without the prescription of the doctor.

2. A 65-year-old male patient presents to the neurology clinic for a comprehensive neurological examination after reporting episodes of facial numbness and weakness. The neurologist, wanting to assess cranial nerve function and facial muscle integrity, requests the patient to make various facial expressions. When asked to raise his eyebrows and produce forehead wrinkles, the patient demonstrates the ability, indicating the functionality of a specific facial muscle. Which muscle is being tested in this context? “By raising your eyebrows and creating forehead wrinkles, you’re showcasing the functionality of a particular facial muscle. Can you identify which muscle this is from the following options?”

- A. Orbicularis oculi
- B. Orbicularis oris
- C. Occipitofrontalis
- D. Levator labii superioris
- E. Zygomaticus

Correct Answer: C. Occipitofrontalis

The occipitofrontalis muscle complex, consisting of the frontalis and occipitalis muscles, functions to raise the eyebrows and create horizontal wrinkles on the forehead, enabling expressions of surprise, curiosity, and attention. It also contributes to scalp tension regulation and facial expressions, aiding in non-verbal communication.

- **Option A:** The orbicularis oculi encircle the eyes, tightly close the eyelids, and cause “crow’s feet” wrinkles in the skin at the lateral corners of the eyes.
- **Option B:** The orbicularis oris, which encircles the mouth, and the buccinator are sometimes called the kissing muscles because they pucker the mouth. The buccinator also flattens cheeks as in whistling or blowing a trumpet and is therefore sometimes called the trumpeter’s muscle.

- **Option D:** Sneering is accomplished by the levator labii superioris because the muscle elevates one side of the upper lip, and frowning or pouting largely by the depressor anguli oris, which depresses the corner of the mouth.

3. The physician has prescribed esomeprazole (Nexium) for a client with erosive gastritis. The nurse should administer the medication:

- A. 30 minutes before meals
- B. With each meal
- C. In a single dose at bedtime
- D. 30 minutes after meals

Correct Answer: A. 30 minutes before meals

Proton pump inhibitors reduce the production of acid in the stomach. Proton pump inhibitors work best when they are taken 30 minutes before the first meal of the day. Take each dose with a full glass (8 ounces) of water. Esomeprazole is usually given for 4 to 8 weeks only. The doctor may recommend a second course of treatment if the client needs additional healing time.

- **Option B:** It should be taken only once every day. Esomeprazole is used to treat symptoms of gastroesophageal reflux disease (GERD) and other conditions involving excessive stomach acid such as Zollinger-Ellison syndrome. Esomeprazole is also used to promote the healing of erosive esophagitis (damage to the esophagus caused by stomach acid).
- **Option C:** The medicine would not work on its best if taken at bedtime. Use exactly as directed on the label, or as prescribed by the doctor. Swallow the pill whole and do not crush, chew, break, or open it. Esomeprazole is not for immediate relief of heartburn symptoms.
- **Option D:** Proton pump inhibitors are best taken before the first meal of the day to an empty stomach. Esomeprazole may also be given to prevent gastric ulcer caused by infection with *Helicobacter pylori* (*H. pylori*), or by the use of nonsteroidal anti-inflammatory drugs (NSAIDs).

4. The nurse is assisting a client on a low-potassium diet to select food items from the menu. Which of the following food items, if selected by the client, would indicate an understanding of this dietary restriction?

- A. Cantaloupe
- B. Spinach
- C. Lima beans
- D. Strawberries

Correct Answer: C. Lima beans

Lima beans (1/3 c) averages three (3) mEq per serving. Each serving of lima beans provides nearly 11 grams of protein—slightly more than other types of beans. Lima beans have a glycemic index (GI) of about 46. (Foods with a GI of 55 or below are considered low glycemic foods.) The glycemic load of a 100-gram serving of lima beans is about 7.

- **Option A:** Cantaloupe (1/4 small). Consuming foods rich in potassium can help decrease blood pressure. The American Heart Association (AHA) recommends that an average adult consume

4,700 mg of potassium a day to keep the cardiovascular system healthy. A cup of cantaloupe provides 473 mg of potassium, or 10% of a person's recommended daily intake.

- **Option B:** Spinach (1/2 cooked). Spinach provides more potassium per serving than a banana — about 12% of the AI per one cup (156 grams) frozen or three cups (100 grams) fresh. This vegetable also packs vitamins A and K, as well as folate and magnesium.
- **Option D:** Strawberries (1 ¼ cups) are high potassium foods and average 7 mEq per serving. Strawberries are rich in vitamin C, potassium, folic acid, and fiber. Due to their high potassium content, strawberries might provide benefits for people who have a raised risk of high blood pressure by helping to offset the effects of sodium in the body.

5. Which development milestone puts the 4-month-old infant at greatest risk for injury?

- A. Switching objects from one hand to another
- B. Crawling
- C. Standing
- D. Rolling over

Correct Answer: D. Rolling over

- Option D: At 4 months of age, the infant can roll over, which makes it vulnerable to falls from dressing tables or beds without rails.
- Option A: Switching objects from one hand to another does not prove a threat to safety.
- Options B and C: A 4-month-old is not capable of crawling or standing.

6. You are a pediatric nurse at a community health clinic, providing prenatal and postnatal education to families. Today, you are facilitating a parent group focusing on infant care. During the session, you are discussing various aspects including sleep safety, feeding, and developmental stimulation. You present several actions and ask the group to identify which action is NOT appropriate for a 2-month-old infant. Given the following options, select the action that is NOT appropriate for the care of a 2-month-old infant:

- A. Place the infant on her back for naps and bedtime.
- B. Allow the infant to cry for 5 minutes before responding if she wakes during the night as she may fall back asleep.
- C. Talk to the infant frequently and make eye contact to encourage language development.
- D. Wait until at least 4 months to add infant cereals and strained fruits to the diet.
- E. Offer the infant cow's milk as a supplement to breastmilk or formula.
- F. Place a soft blanket and several plush toys in the crib for comfort.

Correct Answer: E. Offer the infant cow's milk as a supplement to breastmilk or formula.

Cow's milk should not be given to infants under 1 year of age as it lacks essential nutrients present in breastmilk or infant formula, and can irritate the infant's immature gastrointestinal system.

- **Option A:** This action aligns with safe sleep recommendations to reduce the risk of sudden infant death syndrome (SIDS). Placing infants on their backs to sleep is the correct position for infants up to 1 year of age.
- **Option B:** While it may be challenging for parents to hear their infant cry, a short waiting period before responding may allow the infant to self-soothe and fall back asleep. It's a common method used in some sleep training approaches. However, at 2 months of age, immediate response to crying is often recommended to build trust and security.
- **Option C:** Talking to the infant and making eye contact are crucial for socio-emotional and language development. This interaction helps in forming a secure attachment and stimulating brain development.
- **Option D:** It is recommended to wait until around 6 months before introducing solid foods, though some pediatricians may suggest starting as early as 4 months if the infant is showing readiness signs. Hence, waiting until at least 4 months to add cereals and strained fruits is appropriate.
- **Option F:** Placing a soft blanket and plush toys in the crib can be dangerous and is not recommended as it increases the risk of suffocation and SIDS. Safe sleep guidelines recommend keeping the crib free of soft bedding, bumpers, and toys.

7. Which roommate would be most suitable for the 6-year-old male with a fractured femur in Russell's traction?

- A. 16-year-old female with scoliosis
- B. 12-year-old male with a fractured femur
- C. 10-year-old male with sarcoma
- D. 6-year-old male with osteomyelitis

Correct Answer: B. 12-year-old male with a fractured femur

The 6-year-old should have a roommate as close to the same age as possible, so the 12-year-old is the best match. A bed is available and the patient gets assigned. There are certain constraints—sex, semi-private versus private, isolation issues, acuity, telemetry and specialty needs. All need to be taken into account to ensure that each patient goes to the right place and receives the proper care. But good capacity management demands that bed assignment be carefully considered and executed.

- **Option A:** The client is too old and is female. Bed assignment simply provides the proper location based on specific patient attributes like sex, isolation, telemetry, acuity, and specialty needs.
- **Option C:** The 10-year-old with sarcoma has cancer and will be treated with chemotherapy that makes him immune suppressed. Bed managers aim at finding an assignment of patients to rooms that strikes a balance between patients' preferences and comfort on the one hand, and patients' clinical conditions and the resulting required room facilities on the other.
- **Option D:** The 6-year-old with osteomyelitis is infectious. Rooms and beds belong to the critical assets of just any hospital. They account for a considerable part of a hospital's infrastructure, and a large amount of financial resources are invested in equipping them with medical apparatus to facilitate patient care. Furthermore, they also represent the place where most patients will spend a large part of their stay, as they recover from surgery, wait for examinations to take place, etc.

8. The nurse is caring for four clients receiving IV infusions of normal saline. Which client is at the highest risk for bloodstream infection?

- A. A client who has a non-tunneled central line in the left internal jugular vein.
- B. A client with an implanted port in the right subclavian vein.
- C. A client with a peripherally inserted central catheter (PICC) line in the right upper arm.
- D. A client who has midline IV catheter in the left antecubital fossa.

Correct Answer: A. A client who has a non-tunneled central line in the left internal jugular vein

Central lines are associated with a higher infection risk, the skin of the neck and chest have high numbers of microorganisms, and the line is non-tunneled: such factors increase the risk for infection. About half of nosocomial bloodstream infections occur in intensive care units, and the majority of them are associated with intravascular devices. Central-venous-catheter-related bloodstream infections (CRBSIs) are an important cause of healthcare-associated infections.

- **Option B:** Implanted ports are placed under the skin and so are less likely to be associated with catheter infection than a non-tunneled central IV line. Inflow obstruction (7.6%) and infection (6.9%) were the main complications, followed by reflux (3.1%), subcutaneous masses (1.5%) and fistulae (1.5%). The median interval between port implantation and port complication was 5.4 months (range: 0.3–40.9 months).
- **Option C:** A peripherally inserted central catheter (PICC) infection occurs when bacteria enters the bloodstream through or around a central line catheter. A PICC is a long, thin tube that is inserted through a vein in the arm.
- **Option D:** Midline catheters are associated with a lower incidence of infection. Midline catheters (MCs) are peripheral IV access devices that may reduce the need for central lines and hence decrease central line-associated bloodstream infections.

9. A health care issue often becomes an ethical dilemma because:

- A. A client's legal rights coexist with a health professional's obligation.
- B. Decisions must be made quickly, often under stressful conditions.
- C. Decisions must be made based on value systems.
- D. The choices involved do not appear to be clearly right or wrong.

Correct Answer: D. The choices involved do not appear to be clearly right or wrong.

Advances in medicine, increasing economic stress, a rise of patient self-determination, and differing values between healthcare workers and patients are among the many factors contributing to the frequency and complexity of ethical issues in healthcare.

- **Option A:** Nurses are required to administer prescribed medicine, but patients, at the same time, can refuse them. Patient autonomy can go against medical directives, despite clearly defined needs. Patients have a right to refuse all medical care. ANA highlights that it is important for nurses and nurse managers to understand patient backgrounds and individual circumstances to inform the patient of the medical necessity.
- **Option B:** Nurses can also benefit by surrounding themselves with well-seasoned nurses as well as experienced nurse managers. They can rely on the guidance of nurse managers when it comes to situations they may not know how to address. Nurse managers can cultivate educational environments, in which they regularly discuss ethical issues with the nurses in their units. By having open dialogues about ethical issues, nurses can learn from the mistakes others have made and learn how to approach ethical issues and challenges.

- **Option C:** Healthcare, which is science-based and results-driven, can impede religious or personal beliefs. Some religions restrict medical interventions and lifesaving techniques. Nurses focus on providing medical care to reduce suffering and to allow patients to concentrate on self-care. For patients or their families with strong religious or spiritual convictions, the focus may be on adhering to a strict set of guidelines.

10. You're teaching Anthony how to use his new colostomy. How much skin should remain exposed between the stoma and the ring of the appliance?

1/16"

1/4"

1/2"

1"

Correct Answer: A. 1/16"

Only a small amount of skin should be exposed and more than 1/16" of skin allows the excrement to irritate the skin. It is expected that the stoma will change its size (get smaller) for the first four to six weeks after surgery due to the swelling that occurs post-op.

- **Option B:** Cut the wafer slightly larger to accommodate the expansion. Doing this also helps to prevent the wafer from "strangulating" the stoma by putting too much pressure around it.
- **Option C:** Make sure that there's about a 1/16 – 1/8" (approx. 1.5 – 3mm) gap between the stoma and the edge of the hole. Remember, as wafers do swell, the patient may need to adjust this gap accordingly. If using a barrier ring or similar product, it is okay to cut the hole slightly larger
- **Option D:** The pouching system must be completely sealed to prevent leaking of the effluent and to protect the surrounding peristomal skin. The disposable pouching systems can be either a one-piece or a two-piece flexible system consisting of a plastic bag and a flange (skin barrier) that sit against the patient's skin. The flange may be flat or convex.

11. A patient with Hodgkin's lymphoma is undergoing external radiation therapy on an outpatient basis. After 2 weeks of treatment, the patient tells the nurse, "I am so tired I can hardly get out of bed in the morning." An appropriate intervention for the nurse to plan with the patient is to

- Consult with a psychiatrist for treatment of depression
- Establish a time to take a short walk every day
- Exercise vigorously when fatigue is not as noticeable
- Maintain bed rest until the treatment is completed

Correct Answer: B. Establish a time to take a short walk every day

- **Option B:** Walking programs are used to keep the patient active without excessive fatigue.
- **Option A:** Fatigue is expected during treatment and is not an indication of depression.
- **Option C:** Vigorous exercise when the patient is less tired may lead to increased fatigue.
- **Option D:** Bed rest will lead to weakness and other complications of immobility.

12. A mother is so worried that her son took an unknown amount of children's chewable vitamins at an unknown time. While in the ED, the child is alert and asymptomatic. What information should be directly stated to the physician?

- A. The child was nauseated and vomited before arriving in the ED.
- B. The child has been managed multiple times for unexpected injuries.
- C. The child has been treated many times for the ingestion of toxic substances.
- D. The ingested children's chewable vitamins contain iron.

Correct Answer: D. The ingested children's chewable vitamins contain iron.

Iron is a toxic substance that can lead to severe bleeding, shock, hepatic failure, and coma. The antidote that can be used for severe cases of iron poisoning is deferoxamine. Iron poisoning is one of the most common toxic ingestion and one of the most deadly among children. Failure to diagnose and treat iron poisoning can have serious consequences including multi-organ failure and death.

- **Option A:** During the first stage (0.5 to 6 hours), the patient mainly exhibits gastrointestinal (GI) symptoms including abdominal pain, vomiting, diarrhea, hematemesis, and hematochezia. The second stage (6 to 24 hours) represents an apparent recovery phase, as the patient's GI symptoms may resolve despite toxic amounts of iron absorption.
- **Option B:** This information needs further investigation but will not change the immediate diagnostic testing or treatment plan. Patients who have GI symptoms that resolve after a short period of time and have normal vital signs require supportive care and an observation period, as it may represent the second stage of iron toxicity.
- **Option C:** Patients who are symptomatic or demonstrate signs of hemodynamic instability require aggressive management and admission to an intensive care unit. Deferoxamine, a chelating agent that can remove iron from tissues and free iron from plasma, is indicated in patients with systemic toxicity, metabolic acidosis, worsening symptoms, or a serum iron level predictive of moderate or severe toxicity.

13. Which of the following is accurate pertaining to physical exercise and type 2 diabetes mellitus?

- A. Physical exercise can slow the progression of type 2 diabetes mellitus.
- B. Strenuous exercise is beneficial when blood glucose is high.
- C. Patients who take insulin and engage in strenuous physical exercise might experience hyperglycemia.
- D. Adjusting insulin regimen allows for safe participation in all forms of exercise.

Correct Answer: A. Physical exercise can slow the progression of type 2 diabetes mellitus.

Physical exercise slows the progression of type 2 diabetes mellitus because exercise has beneficial effects on carbohydrate metabolism and insulin sensitivity. Exercise improves blood glucose control in type 2 diabetes, reduces cardiovascular risk factors, contributes to weight loss, and improves well-being.

- **Option B:** Daily exercise, or at least not allowing more than 2 days to elapse between exercise sessions, is recommended to enhance insulin action. Adults with type 2 diabetes should ideally perform both aerobic and resistance exercise training for optimal glycemic and health outcomes.

- **Option C:** Insulin action in muscle and liver can be modified by acute bouts of exercise and by regular physical activity. Acutely, aerobic exercise increases muscle glucose uptake up to fivefold through insulin-independent mechanisms.
- **Option D:** Insulin and foods both must be adjusted to allow safe participation in exercise. Aerobic exercise clearly improves glycemic control in type 2 diabetes, particularly when at least 150 min/week are undertaken. Resistance exercise (free weights or weight machines) increases strength in adults with type 2 diabetes by about 50% and improves A1C by 0.57%.

14. Elmer is scheduled for a proctoscopy and has an I.V. The doctor wrote an order for 5mg of I.V. diazepam(Valium). Which order is correct regarding diazepam?

- A. Give diazepam in the I.V. port closest to the vein.
- B. Mix diazepam with 50 ml of dextrose 5% in water and give it over 15 minutes.
- C. Give diazepam rapidly I.V. to prevent the bloodstream from diluting the drug mixture.
- D. Question the order because I.V. administration of diazepam is contraindicated.

Correct Answer: A. Give diazepam in the I.V. port closest to the vein.

Diazepam is absorbed by the plastic I.V. tubing and should be given in the port closest to the vein. Diazepam is a benzodiazepine medication that is FDA approved for the management of anxiety disorders, short-term relief of anxiety symptoms, spasticity associated with upper motor neuron disorders, adjunct therapy for muscle spasms, preoperative anxiety relief, management of certain refractory epilepsy patients and adjunct in severe recurrent convulsive seizures, and an adjunct in status epilepticus.

- **Option B:** Diazepam is available in multiple formulations, including oral tablets, intramuscular injections (IM), intravenous injection (IV), or rectal gel. Of note, oral tablets have a more reliable absorption and controlled release when compared to IM.
- **Option C:** Diazepam is highly lipophilic. While there is a moderately quick onset of action, the drug quickly redistributes. Once in the body, diazepam is mostly broken down by the CYP2C19 and CYP3A4 enzymes to several active metabolites, mainly desmethyldiazepam. Other minor active metabolites include oxazepam and temazepam. The average half-lives of oral diazepam and desmethyldiazepam are about 46 hours and 100 hours, respectively.
- **Option D:** When administered intravenously, diazepam acts within 1 to 3 minutes, while oral dosing onset ranges between 15 to 60 minutes. Diazepam is long-lasting with a duration of action of more than 12 hours.

15. The nurse is assessing a male client 24 hours following a cholecystectomy. The nurse noted that the T-tube has drained 750 mL of green-brown drainage since the surgery. Which nursing intervention is appropriate?

- A. Clamp the T-tube
- B. Irrigate the T-tube
- C. Notify the physician
- D. Document the findings

Correct Answer: D. Document the findings.

Following cholecystectomy, drainage from the T-tube is initially bloody and then turns to a greenish-brown color. The drainage is measured as output. The amount of expected drainage will range from 500 to 1000 mL/day. The nurse would document the output. The fluid may appear bloody for the first day or 2. The color will eventually be golden yellow or greenish, depending on exactly where the catheter is inside the body.

- **Option A:** The doctor may order the t-tube to be clamped at times so bile can drain to the duodenum so fats can be digested during meal times. If choledocholithiasis persists, the T-tube can be clamped to promote stone passage. If signs or symptoms of cholangitis occur, the tube can be unclamped and repeat imaging is obtained.
- **Option B:** The client will need to flush the catheter with normal saline twice a day. If the doctor instructed to flush with less than 10 mL, squirt the extra saline out before connecting the syringe. Push the plunger of the syringe to push 1/3 of the normal saline into the catheter, and then pause. Push in another 1/3 of the normal saline, and pause again. Push in the rest of the normal saline into the catheter. Never pull back on the plunger.
- **Option C:** Notify the physician if the drainage is more than 500 mL/day. Watch for extremely thick, bad-smelling drainage with a fever or extremely bloody like bright red blood that looks fresh. Assess how well the patient tolerated the t-tube being clamped. If the patient develops abdominal pain, nausea, vomiting, etc. unclamp it and notify the physician.

16. Antonietta is taking antitubercular, the most common adverse effect she may be experiencing is:

- A. Red-orange discoloration of urine
- B. Hypersensitivity
- C. Hepatotoxicity
- D. CHF

Correct Answer: C. Hepatotoxicity

Hepatotoxicity is the most common side effect associated with antitubercular agents. All first-line antitubercular medications, rifampin, isoniazid, pyrazinamide, and ethambutol can exert hepatotoxic effects. A continual rise in liver functions test should prompt discontinuation of treatment. Liver function tests should be monitored routinely as rifampin, isoniazid, pyrazinamide, and ethambutol all may exert hepatotoxic effects.

- **Option A:** Orange discoloration is a side effect of rifampin but not with antitubercular in general. Distribution of the drug is high throughout the body, and reaches effective concentrations in many organs and body fluids, including the cerebrospinal fluid. Since the substance itself is red, this high distribution is the reason for the orange-red color of the saliva, tears, sweat, urine, and feces.
- **Option B:** Adverse drug reaction to tuberculous chemotherapy is not an uncommon problem. Usually, it occurs with single drugs and can be treated easily with minimal intervention. Immediate-type allergic reactions from antituberculosis drugs are not rare and not related to disease or treatment characteristics.
- **Option D:** Aminoglycoside induced nephrotoxicity is reversible when stopping the medication. Renal toxicity depends on the patient if any underlying renal disease is present, and on the dose of the medication being administered. Renal insufficiency is avoidable in most patients.

17. How should the nurse prepare an injection for a patient who takes both regular and NPH insulin?

- A. Draw up the NPH insulin, then the regular insulin, in the same syringe.
- B. Draw up the regular insulin, then the NPH insulin, in the same syringe.
- C. Use two separate syringes.
- D. Check with the physician.

Correct Answer: B. Draw up the regular insulin, then the NPH insulin, in the same syringe.

Drugs that are compatible may be mixed together in one syringe. In the case of insulin, the shorter-acting, clear insulin (regular) should be drawn up before the longer-acting, cloudy insulin (NPH) to ensure accurate measurements.

- **Option A:** Insulin, regular when administered subcutaneously, it should be injected 30 to 40 minutes before each meal. Avoid cold injections. The injection is in the buttocks, thighs, arms, or abdomen; it is necessary to rotate injection sites to avoid lipodystrophy. Do not inject if the solution is viscous or cloudy; use only if clear and colorless.
- **Option C:** When administered intravenously, U-100 administration should be with close monitoring of serum potassium and blood glucose. Do not use if the solution is viscous or cloudy; administration should only take place if it is colorless and clear.
- **Option D:** For intravenous infusions, to minimize insulin adsorption to plastic IV tubing, flush the intravenous tube with priming infusion of 20 mL from a 100 mL-polyvinyl chloride bag insulin, every time a new intravenous tubing is added to the insulin infusion container.

18. A client with diabetes mellitus visits a health care clinic. The client's diabetes previously had been well controlled with glyburide (Diabeta), 5 mg PO daily, but recently, the fasting blood glucose has been running 180-200 mg/dl. Which medication, if added to the clients regimen, may have contributed to the hyperglycemia?

- A. prednisone (Deltasone)
- B. atenolol (Tenormin)
- C. phenelzine (Nardil)
- D. allopurinol (Zyloprim)

Correct Answer: A. prednisone (Deltasone)

Prednisone may decrease the effect of oral hypoglycemics, insulin, diuretics, and potassium supplements. Prednisone may interfere with blood glucose control and reduce the effectiveness of metFORMIN and other diabetic medications. Monitor blood sugar levels closely. The client may need a dose adjustment of the diabetic medications during and after treatment with prednisone.

- **Option B:** Research results indicated that atenolol can inhibit urinary excretion of metformin via decreasing renal rMate1 expression, and long-term atenolol and metformin co-administration may induce potential lactic acidosis.
- **Option C:** Phenelzine may lower blood sugar levels. However, it does not have any effects when taken with oral hypoglycemic agents. Some products that may interact with this drug include: other

antidepressants (including maprotiline, mirtazapine, nefazodone, TCAs such as amitriptyline/nortriptyline), appetite suppressants (such as diethylpropion), drugs for attention deficit disorder (such as atomoxetine, methylphenidate), apraclonidine, bupropion, etc.

- **Option D:** No interactions were found between allopurinol and metformin. Allopurinol may also increase the risk of developing a rash if taken with antibiotics ampicillin or amoxicillin. Allopurinol may also increase the effect of warfarin and other drugs that thin the blood. These are known as anticoagulants.

19. Nurse Ron enters a client's room, the client says, "They're crawling on my sheets! Get them off my bed!" Which of the following assessments is the most accurate?

- A. The client is experiencing aphasia.
- B. The client is experiencing dysarthria.
- C. The client is experiencing a flight of ideas.
- D. The client is experiencing visual hallucination.

Correct Answer: D. The client is experiencing visual hallucination

The presence of a sensory stimulus correlates with the definition of a hallucination, which is a false sensory perception. Visual hallucinations involve seeing things that aren't there. The hallucinations may be of objects, visual patterns, people, or lights. Hallucinations, defined as the perception of an object or event (in any of the 5 senses) in the absence of an external stimulus, are experienced by patients with conditions that span several fields (e.g., psychiatry, neurology, and ophthalmology). When noted by nonpsychiatrists, visual hallucinations, one type of sensory misperception, often trigger requests for psychiatric consultation, although visual hallucinations are not pathognomonic of a primary psychiatric illness.

- **Option A:** Aphasia refers to a communication problem. Aphasia is an impairment of language, affecting the production or comprehension of speech and the ability to read or write. Aphasia is always due to injury to the brain—most commonly from a stroke, particularly in older individuals. But brain injuries resulting in aphasia may also arise from head trauma, from brain tumors, or from infections.
- **Option B:** Dysarthria is a difficulty in speech production. Dysarthria is a motor speech disorder in which the muscles that are used to produce speech are damaged, paralyzed, or weakened. The person with dysarthria cannot control their tongue or voice box and may slur words. Motor speech disorders like dysarthria result from damage to the nervous system. Many neuromuscular conditions (diseases that affect the nerves controlling certain muscles) can result in dysarthria. In dysarthria, the muscles used to speak become damaged, paralyzed, or weakened.
- **Option C:** Flight of ideas is rapidly shifting from one topic to another. A nearly continuous flow of accelerated speech with abrupt changes from topic to topic that are usually based on understandable associations, distracting stimuli, or plays on words. When severe, speech may be disorganized and incoherent. It is part of the DSM-5 criteria for Manic episodes.

20. Nikki reveals that the boyfriend has been pressuring her to engage in premarital sex. The most therapeutic response by the nurse is:

- A. "I can refer you to a spiritual counselor if you like."

- B. "You shouldn't allow anyone to pressure you into sex."
- C. "It sounds like this problem is related to your paralysis."
- D. "How do you feel about being pressured into sex by your boyfriend?"

Correct Answer: D. "How do you feel about being pressured into sex by your boyfriend?"

Focusing on the expression of feelings is therapeutic. The central force of the client's condition is anxiety. Focusing, an approach to therapeutic treatment in which the therapist works to help the individual in treatment gain awareness into their bodily felt sense, is meant to help people seeking treatment learn to direct their attention toward things they experience that are difficult to describe in a concrete way.

- **Option A:** This is not therapeutic because the nurse passes the responsibility to the counselor. Focusing can help people become reacquainted with internal awareness of their emotions, helping them become better able to more readily address them. Many of those who pursue focusing therapy or incorporate it into other treatment approaches find they can better describe what they feel and/or desire, cultivate independence from belief systems they no longer subscribe to, and experience greater success in therapy. People also report greater attentiveness in their lives, decreased tension and chronic pain, and increased decision-making and problem-solving abilities. Relationships and life experiences or situations may also be positively impacted.
- **Option B:** Giving advice is not therapeutic. Also influencing the approach is the concept that change is more than a verbal process. Often, the concepts and ideas addressed in therapy are emotions and feelings, things that often cannot be easily put into words. Though a person might be easily aware of these emotions, thoughts, and behaviors on a surface level of awareness, and may even experience some level of insight into them, focusing therapy aims to help them target the deeper "felt" sense. Practitioners of the approach believe that those who are able to access and target this felt sense may be better able to achieve results in therapy, work through the issues concerning them, and produce a physical change in the body through the release of chronic tension.
- **Option C:** This is not therapeutic because it confronts the underlying cause. Grounded in the person-centered approach to treatment, focusing therapy holds that individuals possess within themselves the answers they are seeking and is founded on the concept that individuals know themselves better than a therapist could ever hope to. This "knowing" refers to the knowledge of the body (the body's awareness), however, not the knowledge of the thinking brain. In focusing therapy, therapist and person in treatment work to reaffirm the bodily knowledge a person has and allow the body to steer a person within future situations.

21. A client who has ulcerative colitis has persistent diarrhea. He is thin and has lost 12 pounds since the exacerbation of his ulcerative colitis. The nurse should anticipate that the physician will order which of the following treatment approaches to help the client meet his nutritional needs?

- A. Initiate continuous enteral feedings.
- B. Encourage a high protein, high-calorie diet.
- C. Implement total parenteral nutrition.
- D. Provide six small meals a day.

Correct Answer: C. Implement total parenteral nutrition.

Food will be withheld from the client with severe symptoms of ulcerative colitis to rest the bowel. To maintain the client's nutritional status, the client will be started on TPN. Dietary measures depend on the patient's condition (if disease is mild, the patient may do well on a low-residue, low-fat diet high in protein and calories with lactose restriction). In moderate disease, elemental enteral products may be given to provide nutrition without overstimulating the bowel. Patient with toxic colitis is NPO and placed on parenteral nutrition.

- **Option A:** Enteral feedings do not allow the bowel to rest. Recommend rest before meals. This quiets peristalsis and increases available energy for eating. Encourage bed rest and limited activity during the acute phase of illness. Decreasing metabolic needs aids in preventing caloric depletion and conserves energy.
- **Option B:** A high-calorie, high-protein diet will worsen the client's symptoms. Avoid or limit foods that might cause or exacerbate abdominal cramping, flatulence (milk products, foods high in fiber or fat, alcohol, caffeinated beverages, chocolate, peppermint, tomatoes, orange juice). Individual tolerance varies, depending on the stage of disease and area of bowel affected.
- **Option D:** Dividing the diet into 6 small meals does not allow the bowel to rest. Keep patient NPO as indicated. Resting the bowel decreases peristalsis and diarrhea, limiting malabsorption and loss of nutrients.

22. During a dermatology rotation, a group of medical students are provided with a case study of a burn patient who sustained significant damage to the skin. The supervising dermatologist emphasized the multiple crucial functions of the skin and how each might be compromised due to the injury. The students were then challenged to identify a function that is NOT primarily associated with the skin, based on their learning. Which of the following functions is NOT a primary role of the skin?

- A. Temperature regulation
- B. Protection
- C. Sensation
- D. Vitamin B production

Correct Answer: D. Vitamin B production

This is NOT a primary function of the skin. The skin is responsible for the synthesis of Vitamin D when exposed to sunlight, not Vitamin B. Vitamin B production is primarily associated with the gut flora in the intestines and the food we consume.

- **Option A:** Temperature regulation. The skin plays an essential role in regulating body temperature. Through mechanisms such as sweating and vasodilation, the skin helps dissipate heat. Conversely, vasoconstriction in the skin helps to retain heat.
- **Option B:** Protection. The skin serves as the body's first line of defense against environmental factors such as pathogens, UV radiation, and physical trauma. Its multi-layered structure and the presence of various immune cells help in providing this protective function.
- **Option C:** Sensation. The skin is rich in nerve endings and receptors that can detect temperature, pressure, touch, pain, and vibration. This sensory function allows individuals to react to their environment and avoid potential harm.

23. Culture strongly influences pain expression and the need for pain medication. However, cultural pain:

- A. May be suffered by a client whose valued way of life is disregarded by practitioners.
- B. Is more intense, thus necessitating more medication.
- C. Is not expressed verbally or physically.
- D. Is expressed only to others of like culture.

Correct Answer: A. May be suffered by a client whose valued way of life is disregarded by practitioners.

Nurses need not assume that pain relief is equally valued across groups. Cultural pain may be suffered by a client whose valued way of life is disregarded by practitioners. The relationship between pain and ethnicity is shaped by experience, learning and culture. A cultural group's expectations and acceptance of pain as a normal part of life will determine whether pain is seen as a clinical problem that requires a clinical solution.

- **Option B:** Experience, learning and culture shape the relationship between pain and ethnicity rather than any fundamental neurological differences. The distinction between race and ethnicity is particularly important for pain research based on the biopsychosocial model. This model suggests the experience of pain is derived via the interaction of biological, psychological, and social factors.
- **Option C:** Chronic pain affects approximately 1 in 5 adults in Europe resulting in substantial healthcare costs. Evidence that cultural influences have an impact on pain is readily available from the UK where the pain is the most common symptom encountered by the medical profession.
- **Option D:** Mistaken beliefs about the nature of pain and disability, resistance to treatment-seeking, reluctance to comply with treatment, and failure to accept responsibility for the treatment outcome are not culturally or sub-culturally specific obstacles to pain management.

24. Nurse Gretchen is discussing the use of cocaine as a local anesthetic with a nursing student. Which statement by the student indicates understanding of this agent?

- A. "Anesthetic effects develop slowly and persist for several hours."
- B. "Cocaine is a local anesthetic administered by injection."
- C. "Vasoconstrictors should not be used as adjunct agents with this drug."
- D. "When abused, cocaine causes physical dependence."

Correct Answer: C. "Vasoconstrictors should not be used as adjunct agents with this drug."

Cocaine should not be combined with epinephrine or other vasoconstrictors, because it causes vasoconstriction itself, and the combination could precipitate severe hypertension. The principal action of cocaine on the mucosa is anesthesia and vasoconstriction, however significant systemic absorption may occur; this may adversely affect the cardiovascular system, after which alpha- and beta 1-adrenoceptor stimulation results in increased heart rate, systemic arterial pressure, and myocardial contractility, which are major determinants of myocardial oxygen demand.

- **Option A:** Cocaine has a rapid onset of effects, which last about 1 hour. Cocaine and its metabolites may cause arterial vasoconstriction hours after use. Epicardial coronary arteries are especially vulnerable to these effects, leading to a decreased myocardial oxygen supply.

- **Option B:** It is used only topically for anesthesia. Topical cocaine has an anesthetic effect similar to local anesthetics (such as lidocaine) from sodium channel blockade and interference with action potential propagation. This Vaughn-Williams class IC effect also increases the risk of conduction disturbance and tachyarrhythmias.
- **Option D:** Although subject to widespread abuse with profound psychological dependence, it does not cause substantial physical dependence. The fatal dose of cocaine has been estimated to be 1.2 g, but there are reports of severe adverse effects from doses as low as 20 mg. The single-use vial contains four mL of a 40 mg/mL solution, thus 160 mg in total. There is also a multi-use vial containing 10 mL of 4% cocaine. As mucosal absorption is variable, the possibility of receiving the entire amount of cocaine is low, especially when delivered by cotton pledgets or gauze.

25. What is the term used to describe an enlargement of the heart muscle?

- A. Cardiomegaly
- B. Cardiomyopathy
- C. Myocarditis
- D. Pericarditis

Correct Answer: A. Cardiomegaly

Cardiomegaly denotes an enlarged heart muscle. The most critical pathophysiological changes leading to cardiomegaly include dilated hypertrophy, fibrosis, and contractile malfunction. Contractile dysfunction and abnormal myocardial remodeling can lead to hypertrophic cardiomyopathy or dilated cardiomyopathy. Mechanical stretching, circulating neurohormones, and oxidative stress are significant stimuli for the signal transduction of inflammatory cytokines and MAP kinase in cardiomyocytes. Signal transduction leads to changes in structural proteins and proteins that regulate excitation-contraction. Dilated cardiomyopathy mutations result in a reduced force of the sarcomere contraction and a reduction in sarcomere content. Hypertrophic cardiomyopathy mutations result in a molecular phenotype of hyperdynamic contractility, poor relaxation, and increased energy consumption.

- **Option B:** Cardiomyopathy is a heart muscle disease of unknown origin. In cardiomyopathy, the heart muscle becomes enlarged, thick, or rigid. In rare cases, the muscle tissue in the heart is replaced with scar tissue.
- **Option C:** Myocarditis refers to inflammation of the heart muscle. It is an inflammatory disease of the myocardium with a wide range of clinical presentations, from subtle to devastating.
- **Option D:** Pericarditis is an inflammation of the pericardium. Pericarditis is usually acute – it develops suddenly and may last up to several months. The condition usually clears up after 3 months, but sometimes attacks can come and go for years. When a client has pericarditis, the membrane around the heart is red and swollen, like the skin around a cut that becomes inflamed. Sometimes there is extra fluid in the space between the pericardial layers, which is called pericardial effusion.

26. A 58-year-old male patient, Mr. Thompson, is admitted to the telemetry unit after presenting with episodes of dizziness and palpitations. He has a known history of heart disease and is being closely monitored for any cardiac arrhythmias. The on-duty nurse takes this opportunity to mentor a junior nurse on the intricacies of the cardiac action potential, using Mr. Thompson's ECG tracings as a visual aid. The senior nurse explains the phases and stresses the

importance of understanding the underlying cellular events that lead to the observed patterns on the ECG. While discussing, she poses a question to the junior nurse about the events during the depolarization phase. Reflecting on the teaching session and the patient's condition, which of the following events will NOT occur during the depolarization phase of the cardiac action potential?

- A. Influx of calcium ions into the cardiac cell
- B. Efflux of potassium ions from the cardiac cell
- C. Closure of sodium channels
- D. Activation of voltage-gated sodium channels

Correct Answer: B. Efflux of potassium ions from the cardiac cell

Efflux of potassium ions from the cardiac cell occurs during the repolarization phase, not during depolarization.

- **Option A:** Influx of calcium ions into the cardiac cell is an essential event during the depolarization phase, contributing to the plateau phase of the action potential.
- **Option C:** Closure of sodium channels is a critical event during depolarization as it leads to the influx of sodium ions, initiating the action potential.
- **Option D:** Activation of voltage-gated sodium channels is a crucial step during the depolarization phase, allowing the influx of sodium ions and the rapid upstroke of the action potential.

27. Which of the following is the most common cause of dementia among elderly persons?

- A. Parkinson's disease
- B. Multiple sclerosis
- C. Amyotrophic lateral sclerosis (Lou Gehrig's disease)
- D. Alzheimer's disease

Correct Answer: D. Alzheimer's disease

Alzheimer's disease, sometimes known as senile dementia of the Alzheimer's type or primary degenerative dementia, is an insidious; progressive, irreversible, and degenerative disease of the brain whose etiology is still unknown. Alzheimer's is the most common cause of dementia among older adults. Dementia is the loss of cognitive functioning—thinking, remembering, and reasoning—and behavioral abilities to such an extent that it interferes with a person's daily life and activities.

- **Option A:** Parkinson's disease is a neurologic disorder caused by lesions in the extrapyramidal system and manifested by tremors, muscle rigidity, hypokinesia, dysphagia, and dysphonia. Parkinson's disease is a neurodegenerative disorder that mostly presents in later life with generalized slowing of movements (bradykinesia) and at least one other symptom of resting tremor or rigidity. Other associated features are a loss of smell, sleep dysfunction, mood disorders, excess salivation, constipation, and excessive periodic limb movements in sleep (REM behavior disorder).
- **Option B:** Multiple sclerosis, a progressive, degenerative disease involving demyelination of the nerve fibers, usually begins in young adulthood and is marked by periods of remission and exacerbation. Multiple sclerosis (MS) is a chronic autoimmune disease of the central nervous system (CNS) characterized by inflammation, demyelination, gliosis, and neuronal loss.

Pathologically, perivascular lymphocytic infiltrates, and macrophages produce degradation of myelin sheaths that surround neurons.

- **Option C:** Amyotrophic lateral sclerosis, a disease marked by progressive degeneration of the neurons, eventually results in atrophy of all the muscles; including those necessary for respiration. Amyotrophic lateral sclerosis (ALS), also known as “Lou Gehrig’s disease,” is a neurodegenerative disease of the motor neurons. No single etiology has been proven; rather, multiple pathways (both heritable and sporadic) have been shown to result in unmistakably similar disease entities. ALS necessarily affects both upper and lower motor neurons with variable patterns of onset, most commonly beginning with signs of lower motor neuron degeneration within proximal limbs.

28. The nurse is caring for a client who is receiving a chemotherapy. Which of the following would be expected as a result of the massive cell destruction that occurred from the chemotherapy?

- A. Leukopenia
- B. Anemia
- C. Thrombocytopenia
- D. Hyperuricemia

Correct Answer: D. Hyperuricemia.

Increased levels of uric acid (Hyperuricemia) in the body is common following the treatment for leukemias and lymphomas because chemotherapy results in massive cell destruction.

- **Options A, B, & C:** These are usually noted, but an increased uric acid level is specifically related to massive cell destruction.

29. A client with diabetes visits the prenatal clinic at 28 weeks gestation. Which statement is true regarding insulin needs during pregnancy?

- A. Insulin requirements moderate as the pregnancy progresses.
- B. A decreased need for insulin occurs during the second trimester.
- C. Elevations in human chorionic gonadotropin decrease the need for insulin.
- D. Fetal development depends on adequate insulin regulation.

Correct Answer: D. Fetal development depends on adequate insulin regulation.

Fetal development depends on adequate nutrition and insulin regulation. Significant alterations in maternal metabolism during pregnancy ensure a continuous supply of nutrients to the fetus. Glucose is the primary energy source for the fetus. In early pregnancy, increases in maternal insulin sensitivity enable the storage of energy and nutrients.

- **Option A:** Insulin requirements do not moderate as the pregnancy progresses. To counteract insulin resistance and achieve adequate metabolic control in late pregnancy, the dose of insulin may need to be increased. Understanding insulin requirements in pregnant women with type 1 diabetes would help them to maintain tight glycemic control.
- **Option B:** Insulin needs to increase during the second and third trimesters. In late pregnancy, maternal insulin resistance develops due to increases in pregnancy-related hormones, such as

progesterone, human placental lactogen and prolactin, as well as inflammatory cytokines, such as tumor necrosis factor-?. These changes facilitate the supply of glucose toward the fetus.

- **Option C:** Elevated human chorionic gonadotropin elevates insulin needs, not decreases them. Insulin dose prior to pregnancy was associated with pre-pregnancy body weight, BMI, and HbA1c levels before pregnancy and in the first trimester. Insulin dose prior to pregnancy was higher in patients with male infants than patients with female infants.

30. All potassium-sparing diuretics:

- A. Are required supplements during blood transfusion.
- B. Enhance aldosterone action.
- C. Cause hypokalemia.
- D. Are weak diuretics.

Correct Answer: D. Are weak diuretics.

Potassium-sparing diuretics are not potent diuretics when used alone. They are used as adjunctive therapy with other diuretics to minimize potassium loss. Potassium-sparing diuretics, which include amiloride (Midamor), spironolactone (Aldactone), and eplerenone (Inspra), avoid the potential problem of potassium loss. But the opposite problem can occur. If potassium levels become too high, it can cause dangerous heart rhythm problems and even cardiac arrest.

- **Option A:** Potassium-sparing diuretics given during blood transfusions tend to cause hyperkalemia because potassium is present in the transfusion.
- **Option B:** These drugs block aldosterone's effects. Potassium-sparing diuretics, which include amiloride (Midamor), spironolactone (Aldactone), and eplerenone (Inspra), avoid the potential problem of potassium loss. But the opposite problem can occur. If potassium levels become too high, it can cause dangerous heart rhythm problems and even cardiac arrest.
- **Option C:** These drugs cause hyperkalemia, not hypokalemia. People with high blood pressure or heart failure are often advised to limit how much salt or sodium they consume. One way to do that is to use salt substitutes, but these products are high in potassium—a quarter teaspoon of one brand contains about 800 mg of potassium. So, people who take potassium-sparing diuretics should avoid these products.

31. When a client is confused, left alone with the side rails down, and the bed in a high position, the client falls and breaks a hip. What law has been broken?

- A. Assault
- B. Battery
- C. Negligence
- D. Civil tort

Correct Answer: C. Negligence

Knowing what to do to prevent injury is a part of the standards of care for nurses to follow. Safety guidelines dictate raising the side rails, staying with the client, lowering the bed, and observing the client until the environment is safe. As a nurse, these activities are known as basic safety measures that prevent injuries, and to not perform them is not acting in a safe manner. Negligence is conduct that

falls below the standard of care that protects others against unreasonable risk of harm.

- **Option A:** Assault is the intentional act of making someone fear that the nurse will cause them harm. One does not have to actually harm them to commit assault. Threatening them verbally or pretending to hit them are both examples of assault.
- **Option B:** Battery is the intentional act of causing physical harm to someone. Unlike assault, one doesn't have to warn the victim or make him fearful before they hurt them for it to count as a battery. If a nursing home attendant surprises the patient and pushes the patient from behind, that would qualify as a battery.
- **Option D:** Torts are civil laws that address the legal rights of patients and the responsibilities of the nurse in the nurse-patient relationship. Some torts specific to nursing and nursing practice include things like malpractice, negligence, and violations relating to patient confidentiality.

32. 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.

33. The client returns to the nursing unit following a pyelolithotomy for removal of a kidney stone. A Penrose drain is in place. Which of the following would the nurse include in the client's postoperative care?

- A. Sterile irrigation of the Penrose drain.
- B. Frequent dressing changes around the Penrose drain.
- C. Weighing the dressings.
- D. Maintaining the client's position on the affected side.

Correct Answer: B. Frequent dressing changes around the Penrose drain.

Frequent dressing changes around the Penrose drain is required to protect the skin against breakdown from urinary drainage. If urinary drainage is excessive, an ostomy pouch may be placed over the drain to protect the skin. Change the dressing 2 times every day and anytime it's wet or loose. It's best to change it around the same time every day.

- **Option A:** A Penrose drain is not irrigated. A Penrose drain is a soft, flat, flexible tube made of latex. It lets blood and other fluids move out of the area of the surgery. This keeps fluid from collecting under the incision (surgical cut) and causing infection.
- **Option C:** Weighing the dressings is not necessary. Look at the color and amount of drainage and notice any odor before throwing it away. Write down what you see and smell in the drainage log at the end of this resource.
- **Option D:** Placing the client on the affected side will prevent a free flow of urine through the drain. Part of the Penrose drain will be inside the body. One or both ends of the drain will come out of the incision. Some blood and fluid will flow out of the drain onto a dressing (gauze bandage) around it.

34. A patient is admitted with lacerated liver as a result of blunt abdominal trauma. Which of the following nursing interventions would not be appropriate for this patient?

- A. Monitor for respiratory distress.
- B. Monitor for coagulation studies.
- C. Administer pain medications as ordered.
- D. Administer normal saline, crystalloids as ordered.

Correct Answer: C. Administer pain medications as ordered.

Pain medication may mask signs and symptoms of hemorrhage, further decrease blood pressure, and interfere with assessment of neurologic status and additional abdominal injury. With the potential for hemorrhage, nonsteroidal anti-inflammatory drugs (NSAIDs) probably should be avoided. Acetaminophen with or without small quantities of mild narcotic analgesics may be all that should be prescribed initially. Minimize use of analgesics in patients who are admitted for observation.

- **Option A:** The evaluation of any trauma patient begins with evaluating the airway, accessing the breathing, and managing the circulation. The diagnosis of intra-abdominal injury following blunt trauma depends primarily on the hemodynamic status of the patient. Once the airway is protected, it is mandatory to protect the cervical spine.
- **Option B:** Because the presentation is often not straightforward, the diagnosis can be difficult and often time-consuming. Besides pain, the patient may present with bleeding per rectum, unstable vital signs, and the presence of peritonitis. The physical exam may reveal marks from a lap belt, ecchymosis, abdominal distention, absent bowel sounds, and tenderness to palpation.
- **Option D:** After the primary survey is complete, patients who are hypotensive require aggressive fluid resuscitation. If hemodynamic instability persists, blood should be typed and crossed, but in

the meantime, immediate transfusion with O negative blood can be done (O+ for males and women past childbearing years). All patients with blunt abdominal trauma who have signs of peritonitis, frank bleeding, or worsening of clinical signs require an immediate laparotomy.

35. The nurse is evaluating a client recently diagnosed with primary open angle glaucoma (POAG). What will an important nursing action be? Select all that apply.

- A. Review meds the client is currently on to determine whether any of them cause an increased intraocular pressure as a side effect.
- B. Determine whether the client has any sudden loss of vision accompanied by pain.
- C. Discuss with the client the importance of controlling blood pressure to decrease the potential loss of peripheral vision.
- D. Instruct the client to take analgesics as soon as any discomfort occurs in the eye and to notify clinic if pain is not relieved.
- E. Have the client demonstrate the use of eye drops.
- F. Assess the client for chronic diseases such as diabetes.

Correct Answer: A, E, and F.

Open-angle glaucoma is a chronic, progressive, and irreversible multifactorial optic neuropathy that is characterized by an open angle of the anterior chamber, optic nerve head changes, progressive loss of peripheral vision, followed by central visual field loss.

- **Option A:** Medications must be evaluated in terms of their potential for increasing the intraocular pressure. An increase in intraocular pressure could cause further damage to a patient with POAG.
- **Option B:** POAG is painless. Early changes in OAG involve a loss of peripheral vision that the patient is usually not aware of until 40% of their nerve fibers have been compromised, only then do they start to notice having “tunnel vision.”
- **Option C:** The question states the client is already diagnosed. Open-angle glaucoma is often asymptomatic in its early stages, therefore, a thorough and comprehensive history and exam can be instrumental in detecting the disease early.
- **Option D:** POAG is not correlated to BP. Elevated intraocular pressure is an important risk factor for open-angle glaucoma and can be a result of primary or secondary causes.
- **Option E:** Ophthalmic drops are often prescribed for glaucoma and clients should know how to administer them correctly. Some patients will attempt to use their drops every day but will fail to properly deliver the medications into their eyes and thus the medication will not be absorbed, specifically at-risk elder populations, who may struggle with administering drops into their own eyes.
- **Option F:** Diabetes is a risk factor and its management is important in helping slow POAG. Type 2 diabetes is a risk factor for primary open-angle glaucoma. This has been demonstrated by large epidemiologic studies including the Los Angeles Latino Eye Study and the Blue Mountains eye study in Australia.

36. Which of the following factors would the nurse suspect as predisposing a client to placenta previa?

- A. Multiple gestation
- B. Uterine anomalies
- C. Abdominal trauma
- D. Renal or vascular disease

Correct Answer: A. Multiple gestation

Multiple gestation is one of the predisposing factors that may cause placenta previa. Placenta previa is more common in older and multiparous women. The reason is not clear but it may be associated with the aging of the vasculature of the uterus. This causes placental hypertrophy and enlargement which increases the likelihood of the placenta encroaching on lower segment

- **Option B:** Patients with a unicornuate uterus had high rates of placenta or vasa previa, and three of five pregnancies with placenta previa also had placenta accreta. While this represents a small series, placenta accreta in those with placenta previa has been reported to occur with this frequency in women with multiple prior cesarean deliveries.
- **Option C:** The exact etiology of placental abruption is unknown. However, a number of factors are associated with its occurrence. Risk factors can be thought of in 3 groups: health history, including behaviors, and past obstetrical events, current pregnancy, and unexpected trauma.
- **Option D:** Complications of conservative management of placenta percreta described in the literature include bleeding, infection (endometritis, wound infection, peritonitis, pyelonephritis, uterine necrosis), sepsis and septic shock, fistula formation, thrombosis, pulmonary embolism, pulmonary edema, and the side-effects of methotrexate therapy. Acute renal failure has only been described in one case with methotrexate injection into the umbilical cord and was considered an acute side-effect of methotrexate therapy.

37. The nurse is assessing a client who has just been admitted to the emergency department. Which signs would suggest an overdose of an antianxiety agent?

- A. Combativeness, sweating, and confusion
- B. Agitation, hyperactivity, and grandiose ideation
- C. Emotional lability, euphoria, and impaired memory
- D. Suspiciousness, dilated pupils, and increased blood pressure

Correct Answer: C. Emotional lability, euphoria, and impaired memory

Signs of antianxiety agent overdose include emotional lability, euphoria, and impaired memory. The classic presentation in patients with isolated benzodiazepine overdose will include central nervous system (CNS) depression with normal or near-normal vital signs. Many patients will still be arousable and even provide a reliable history. Classic symptoms include slurred speech, ataxia, and altered mental status.

- **Option A:** Phencyclidine overdose can cause combativeness, sweating, and confusion. PCP begins to cause symptoms at a dose of 0.05mg/kg, and a dose of 20 mg or more can cause seizures, coma, and death. It is mainly metabolized by the liver, and 10% is excreted in the kidneys. Inhalation (the most common route of administration) and intravenous routes of administration produce symptoms in 2 to 5 minutes. Oral ingestion produces symptoms in 30 to 60 minutes.

- **Option B:** Amphetamine overdose can result in agitation, hyperactivity, and grandiose ideation. Methamphetamine (METH) and its derivative, 3,4-methylenedioxymethamphetamine (MDMA), are extensively abused drugs, and the acute effects of these drugs include increased alertness, hyperthermia, decreased appetite, and euphoria. However, long-term abuse can result in neurotoxicity and psychosis.
- **Option D:** Hallucinogen overdose can produce suspiciousness, dilated pupils, and increased blood pressure. Classic hallucinogens can cause users to see images, hear sounds, and feel sensations that seem real but do not exist. The effects generally begin within 20 to 90 minutes and can last as long as 12 hours in some cases (LSD) or as short as 15 minutes in others (synthetic DMT). Hallucinogen users refer to the experiences brought on by these drugs as “trips.” If the experience is unpleasant, users sometimes call it a “bad trip.”

38. Which is the best indicator of success in the long-term management of the client with a somatic disorder?

- A. His symptoms are replaced by indifference to his feelings.
- B. He participates in diversionary activities.
- C. He learns to verbalize his feelings and concerns.
- D. He states that his behavior is irrational.

Correct Answer: C. He learns to verbalize his feelings and concerns.

The client is encouraged to talk about his feelings and concerns instead of using body symptoms to manage his stressors. Teach the client to reframe and dispute cognitive distortions. Disputes need to be strong, specific, and nonjudgmental. Practice and belief in the disputes over time help clients gain a more realistic appraisal of events, the world, and themselves.

- **Option A:** The client is encouraged to acknowledge feelings rather than being indifferent to her feelings. Work with the client to recognize cognitive distortions. Encourage the client to keep a log. Cognitive distortions are automatic. Keeping a log helps make automatic, unconscious thinking clear.
- **Option B:** Participation in activities diverts the client’s attention away from his bodily concerns but this is not the best indicator of success. Problem solve and role play with client acceptable social skills that will help obtain needs effectively and appropriately.
- **Option D:** Help the client recognize that his physical symptoms occur because of or are exacerbated by specific stressor, not as irrational. Give the client honest and genuine feedback regarding your observations as to his or her strengths, and areas that could use additional skills. Feedback helps give clients a more accurate view of self, strengths, areas to work on, as well as a sense that someone is trying to understand them.

39. A month after receiving a blood transfusion an immunocompromised male patient develops a fever, liver abnormalities, a rash, and diarrhea. The nurse would suspect this patient has:

- A. An allergic response to a recent medication.
- B. Graft-versus-host disease (GVHD).
- C. Myelosuppression.

D. Nothing related to the blood transfusion.

Correct Answer: B. Graft-versus-host disease (GVHD)

GVHD occurs when white blood cells in donor blood attack the tissues of an immunocompromised recipient. This process can occur within a month of the transfusion. Options 1 and 4 may be a thought, but the nurse must remember that immunocompromised transfusion recipients are at risk for GVHD. Graft-versus-host disease (GvHD) is a systemic disorder that occurs when the graft's immune cells recognize the host as foreign and attack the recipient's body cells. "Graft" refers to transplanted, or donated tissue, and "host" refers to the tissues of the recipient. It is a common complication after allogeneic hematopoietic stem cell transplant (HCT)

- **Option A:** Allergic reaction, often manifested as urticaria and pruritis, occurs in less than 1% of transfusions. More severe symptoms, such as bronchospasm, wheezing, and anaphylaxis are rare. Allergic reactions may be seen in patients who are IgA deficient as exposure to IgA in donor products can cause a severe anaphylactoid reaction. This can be avoided by washing the plasma from the cells prior to transfusion. Mild symptoms, such as pruritis and urticaria can be treated with antihistamines. More severe symptoms can be treated with bronchodilators, steroids, and epinephrine.
- **Option C:** Another effect of receiving a blood transfusion, immunosuppression, causes a decreased immune response that compromises patients' ability to fight off infection or tumor cells. These effects – sensitization and immunosuppression – are thought to be due largely to white blood cells present in the transfusion product.
- **Option D:** There are multiple complications of blood transfusions, including infections, hemolytic reactions, allergic reactions, transfusion-related lung injury (TRALI), transfusion-associated circulatory overload, and electrolyte imbalance. According to the American Association of Blood Banks (AABB), febrile reactions are the most common, followed by transfusion-associated circulatory overload, allergic reaction, TRALI, hepatitis C viral infection, hepatitis B viral infection, human immunodeficiency virus (HIV) infection, and fatal hemolysis which is extremely rare, only occurring almost 1 in 2 million transfused units of RBC.

40. During an otoscopic examination, which action should be avoided to prevent the client from discomfort and injury?

- A. Tipping the client's head away from the examiner and pulling the ear up and back.
- B. Inserting the otoscope inferiorly into the distal portion of the external canal.
- C. Inserting the otoscope superiorly into the proximal two-thirds of the external canal.
- D. Bracing the examiner's hand against the client's head.

Correct Answer: C. Inserting the otoscope superiorly into the proximal two-thirds of the external canal.

In the superior position, the speculum of the otoscope is nearest the tympanic membrane, and the most sensitive portion of the external canal is the proximal two-thirds. It is important to avoid these structures during the examination. The provider should then slowly progress the speculum into the canal until the tympanic membrane becomes visible. The provider should evaluate the health of the tympanic membrane and observe factors such as color, presence of perforation, and a bulging appearance.

- **Option A:** With the hand that is not holding the otoscope, the provider should grasp and gently pull the patient's pinna to help straighten the patient's external auditory canal. This step will facilitate visualization of the tympanic membrane. In a child, the examiner should pull the pinna posteriorly

and inferiorly. In an adult, the examiner should pull the pinna posteriorly and superiorly.

- **Option B:** During the otoscopic examination, the provider utilizes an otoscope, also known as an auriscope, to visualize the ear anatomy. While performing the otoscopic examination, the provider holds the handle of the otoscope and inserts the cone of the otoscope into the patient's external auditory canal.
- **Option D:** Providers may have their own preferences regarding how to grasp the otoscope. However, it is generally advisable to hold the otoscope like a pen in between the first and second fingers. The otoscope is usually held in the right hand when evaluating the patient's right ear and the left hand when assessing the patient's left ear. The provider should place their free fifth finger of the hand, holding the otoscope against the patient's cheek to support and brace the hand during the examination.

41. Cleo is diagnosed with osteoporosis. Which electrolytes are involved in the development of this disorder?

- A. Calcium and sodium
- B. Calcium and phosphorous
- C. Phosphorus and potassium
- D. Potassium and sodium

Correct Answer: B. Calcium and phosphorous

In osteoporosis, bones lose calcium and phosphate salts, becoming porous, brittle, and abnormally vulnerable to fracture.

- **Option A:** Sodium increases calcium excretion and higher calcium excretion is associated with lower bone mineral density, a predictor of osteoporotic fractures.
- **Option C:** Potassium is not involved in osteoporosis. Potassium salts aid in bone health. A study, published in the journal *Osteoporosis International*, also revealed that high intake of potassium salts significantly reduces the excretion of calcium and acid in urine.
- **Option D:** Sodium, in the form of sodium chloride, elevates urinary calcium excretion and, at prevailing calcium intakes, evokes compensatory responses that may lead to increased bone remodeling and bone loss. However, potassium was inversely associated with both urinary calcium excretion and intestinal calcium absorption, yielding no significant net change in calcium balance.

42. With which of the following disorders is jugular vein distention most prominent?

- A. Abdominal aortic aneurysm
- B. Heart failure
- C. Myocardial infarction
- D. Pneumothorax

Correct Answer: B. Heart failure

Elevated venous pressure, exhibited as jugular vein distention, indicates a failure of the heart to pump.

- **Option A:** Jugular vein distention isn't a symptom of an abdominal aortic aneurysm. The jugular vein is considered a central vein in the body. Central veins are thin-walled, distensible reservoirs and act as a conduit of blood in continuity with the right atrium. The jugular vein divides into external and internal.
- **Option C:** An MI, if severe enough, can progress to heart failure; however, in and of itself, an MI doesn't cause jugular vein distention. In patients with acute inferior-wall MI with right ventricular involvement, distention of neck veins is commonly described as a sign of failure of the right ventricle.
- **Option D:** Pneumothorax does not cause jugular vein distention. A tension pneumothorax can cause severe hypotension (obstructive shock) and even death. An increase in central venous pressure can result in distended neck veins, hypotension.

43. A 68-year-old male patient with a history of Chronic Obstructive Pulmonary Disease (COPD) is admitted to the hospital with exacerbation of his respiratory symptoms. He is experiencing shortness of breath and his blood oxygen levels are low. The nurse is planning the oxygen therapy for this patient, considering the specific needs of patients with COPD. Which statement reflects the most relevant knowledge about oxygen administration to a patient with COPD?

- A. "Oxygen at 1-2L/min is given to maintain the hypoxic stimulus for breathing."
- B. "Hypoxia stimulates the central chemoreceptors in the medulla that makes the client breathe."
- C. "Oxygen is administered best using a non-rebreathing mask."
- D. "Blood gases are monitored using a pulse oximeter."

Correct Answer: A. Oxygen at 1-2L/min is given to maintain the hypoxic stimulus for breathing.

COPD causes a chronic CO₂ retention that renders the medulla insensitive to the CO₂ stimulation for breathing. The hypoxic state of the client then becomes the stimulus for breathing. Giving the client oxygen in low concentrations will maintain the client's hypoxic drive.

- **Option B:** The hypoxic state of the client is the stimulus for breathing.
- **Option C:** The client may use the Venturi mask as a high flow device that delivers a fixed oxygen concentration and is best for clients with COPD.
- **Option D:** Blood gas analysis or arterial blood gas (ABG) test measures the amount of oxygen and carbon dioxide in the blood. It may also be used to determine the pH of the blood, or how acidic it is.

44. When developing a plan of care for a hospitalized child, nurse Mary knows that children in which age group is most likely to view illness as a punishment for misdeeds?

- A. Infancy
- B. Preschool age
- C. School age
- D. Adolescence

Correct Answer: B. Preschool age

Preschool-age children are most likely to view illness as a punishment for misdeeds. When children in this age group become seriously ill, they may think it's punishment for something they did or thought about. They don't understand how their parents could not have protected them from this illness.

- **Option A:** Separation anxiety, although seen in all age groups, is most common in older infants. Keeping a consistent routine is important for a baby and their caregivers. Because babies can't talk about their needs, fear is often expressed by crying.
- **Option C:** Fear of the unknown, loss of control, and separation from family and friends can be the school-aged child's main sources of anxiety and fear related to death. They may fear their own death because of the uncertainty of what happens to them after they die.
- **Option D:** Fear of death is typical of adolescents. Adolescents also fear mutilation. Most teens are starting to establish their identity, independence, and relation to peers. The main theme in teens is feeling immortal or being exempt from death. Their realization of their own death threatens all of these objectives.

45. Which of the following statements provides the rationale for using a hypotonic solution for a patient with FVD?

- A. A hypotonic solution provides free water to help the kidneys eliminate the solute.
- B. A hypotonic solution supplies an excess of sodium and chloride ions.
- C. Excessive volumes are recommended in the early postoperative period.
- D. A hypotonic solution is used to treat hyponatremia.

Correct Answer: A. A hypotonic solution provides free water to help the kidneys eliminate the solute.

Hypotonic solutions provide free water, which helps the kidneys eliminate solute. A solution that contains fewer dissolved particles (such as salt and other electrolytes) than is found in normal cells and blood. Hypotonic solutions are commonly used to give fluids intravenously to hospitalized patients in order to treat or avoid dehydration.

- **Option B:** If a cell is placed in a hypotonic solution, there will be a net flow of water into the cell, and the cell will gain volume. If the solute concentration outside the cell is lower than inside the cell, and the solutes cannot cross the membrane, then that solution is hypotonic to the cell.
- **Option C:** If a cell is placed in a hypertonic solution, there will be a net flow of water out of the cell, and the cell will lose volume. A solution will be hypertonic to a cell if its solute concentration is higher than that inside the cell, and the solutes cannot cross the membrane.
- **Option D:** In severely symptomatic hyponatremia, administer 3% sodium chloride; 100 mL intravenous (IV) bolus (repeat up to twice if symptoms persist). In mild to moderately symptomatic hyponatremia, 3% Sodium chloride, slow infusion (use sodium deficit formula to calculate the rate of infusion but recalculate rate with frequent sodium monitoring).

46. The term "blue bloater" refers to a male client which of the following conditions?

- A. Adult respiratory distress syndrome (ARDS)

- B. Asthma
- C. Chronic obstructive bronchitis
- D. Emphysema

Correct Answer: C. Chronic obstructive bronchitis

Clients with chronic obstructive bronchitis appear bloated; they have large barrel chest and peripheral edema, cyanotic nail beds, and at times, circumoral cyanosis.

- **Option A:** Clients with ARDS are acutely short of breath and frequently need intubation for mechanical ventilation and large amounts of oxygen.
- **Option B:** Clients with asthma don't exhibit characteristics of chronic disease.
- **Option D:** Clients with emphysema appear pink and cachectic.

47. The nurse should recognize that all of the following physical changes of the head and face are associated with the aging client except:

- A. Pronounced wrinkles on the face.
- B. Decreased size of the nose and ears.
- C. Increased growth of facial hair.
- D. Neck wrinkles.

Correct Answer: B. Decreased size of the nose and ears.

The nose and ears of the aging client actually become longer and broader. The chin line is also altered. Height doesn't change after puberty (well, if anything we get shorter as we age) but ears and noses are always lengthening. That's due to gravity, not actual growth. As people age, gravity causes the cartilage in the ears and nose to break down and sag. This results in droopier, longer features.

- **Option A:** Wrinkles on the face become more pronounced and tend to take on the general mood of the client over the years. For example laugh or frown wrinkles above the eyebrows, lips, cheeks, and outer edges of the eye orbit.
- **Option C:** The change in the androgen-estrogen ratio causes an increase in growth of facial hair in most older adults. Women develop excessive body or facial hair due to higher-than-normal levels of androgens, including testosterone. All females produce androgens, but the levels typically remain low.
- **Option D:** The aging process shortens the platysma muscle, which contributes to neck wrinkles. Some amount of neck wrinkling is inevitable. The extent of the necklines and other signs of aging skin are determined in part by genetics. Necklines and wrinkles are a normal part of aging. They're caused in part by skin losing elasticity and being exposed to UV light over time.

48. Which of the following is the best guarantee that the patient's priority needs are met?

- A. Checking with the relative of the patient.
- B. Preparing a nursing care plan in collaboration with the patient.
- C. Consulting with the physician.

D. Coordinating with other members of the team.

Correct Answer: B. Preparing a nursing care plan in collaboration with the patient.

The best source of information about the priority needs of the patient is the patient himself. Hence using a nursing care plan based on his expressed priority needs would ensure meeting his needs effectively. It is about understanding each patient's health outcome goals and health care preferences and ensuring that the care provided is in line with those goals.

- **Option A:** Checking with the relative of the patient would not yield actual needs for the patient. Asking the patient himself would be an assurance that what he deems as the priority would be addressed.
- **Option C:** Consulting or collaborating with the physician should occur after the implementation of independent nursing interventions. A nursing care plan includes independent, dependent, and collaborative nursing interventions specific to every client's needs.
- **Option D:** Collaborating may come after consultation with a physician. Collaboration may include teams from the laboratory services, radiological department, and other departments involved in the care of the patient.

49. The cyanosis that accompanies bacterial pneumonia is primarily caused by which of the following?

- A. Decreased cardiac output.
- B. Pleural effusion.
- C. Inadequate peripheral circulation.
- D. Decreased oxygenation of the blood.

Correct Answer: D. Decreased oxygenation of the blood.

A client with pneumonia has less lung surface available for the diffusion of gases because of the inflammatory pulmonary response that creates lung exudate and results in reduced oxygenation of the blood. The client becomes cyanotic because blood is not adequately oxygenated in the lungs before it enters the peripheral circulation. It is evident that the cyanosis of pneumonia patients is due to the incomplete saturation of venous blood with oxygen in the lungs, and that the various shades of blue observed in the distal parts are caused by an admixture of reduced hemoglobin and oxyhemoglobin in the superficial capillaries.

- **Option A:** With expansion of blood volume in the acute phase of pneumonia, all patients showed an increase in cardiac output, a decrease in arteriovenous oxygen difference, and a decrease in peripheral vascular resistance; however, the percentage change in the hypodynamic patients was not as great as occurred in the patients with normal hemodynamics nor as great as occurred when restudied in convalescence.
- **Option B:** Pleural effusions are common in patients who develop pneumonia. At least 40-60% of patients with bacterial pneumonia will develop a pleural effusion of varying severity. Today, these parapneumonic effusions are not common because of prompt antibiotic therapy.
- **Option C:** The inadequate response to pneumonia is most consistent with depressed myocardial function, but the possibility of decreased intravascular volume as a contributory factor could not be excluded. The arteriovenous oxygen difference was used to assess the adequacy of the circulation to meet peripheral tissue perfusion, and a spectrum of arteriovenous oxygen differences was noted.

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

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

Correct Answer: A. "Your behavior won't be tolerated. Go to your room immediately."

The nurse should set limits on client behavior to ensure a comfortable environment for all clients. The nurse should accept hostile or quarrelsome client outbursts within limits without becoming personally offended. Maintain a consistent approach, employ consistent expectations, and provide a structured environment. Clear and consistent limits and expectations minimize the potential for client's manipulation of staff.

- **Option B:** This is incorrect because it implies that the client's actions reflect feelings toward the staff instead of the client's own misery. Remain neutral as possible; Do not argue with the client. The client can use inconsistencies and value judgments as justification for arguing and escalating mania. Use a calm and firm approach; provide structure and control for a client who is out of control.
- **Option C:** Redirect agitation and potentially violent behaviors with physical outlets in an area of low stimulation (e.g., punching bag). This can help to relieve pent-up hostility and relieve muscle tension. Decrease environmental stimuli (e.g., by providing a calming environment or assigning a private room); helps decrease the escalation of anxiety and manic symptoms.
- **Option D:** Judgmental remarks may decrease the client's self-esteem. Use short, simple, and brief explanations or statements. A short attention span limits understanding to small pieces of information. Chart, in nurse's notes, behaviors; interventions; what seemed to escalate agitation; what helped to calm agitation; when as-needed (PRN) medications were given and their effect; and what proved most helpful.

51. Which of the following describes the role of a technician?

- A. Administers medications to a schizophrenic patient.
- B. The nurse feeds and bathes a catatonic client.
- C. Coordinates diverse aspects of care rendered to the patient.
- D. Disseminates information about alcohol and its effects.

Correct Answer: A. Administers medications to a schizophrenic patient.

Administration of medications and treatments, assessment, documentation are the activities of the nurse as a technician. Nurse technicians are medical care providers who give basic medical care to patients. A nurse tech generally works under the supervision of a Registered Nurse. Also known as nursing attendants or nursing aides, they provide important services to help the registered nurses complete their tasks.

- **Option B:** Activities as a parent surrogate. Many theorists believe the role of mother surrogate is detrimental to the nursing profession. The data suggest that during the 1920s and 1930s, the role

of the nurse as mother surrogate was influential in the evolution of nursing. If this role has existed since the beginning of the profession, nursing theorists may be forced to conclude that it will always remain an integral component of the nursing role.

- **Option C:** Refers to the ward manager role. Nurse managers are responsible for supervising nursing staff in a hospital or clinical setting. They oversee patient care, make management and budgetary decisions, set work schedules, coordinate meetings, and make decisions about personnel.
- **Option D:** Role as a teacher. After nurses graduate from an RN to BSN degree program, they become educators even if they do not work as teachers in academia. Nurses also are responsible for teaching patients about preventing and managing medical conditions. By relaying information, nurses help patients take control of their healthcare.

52. As part of the postpartum assessment, the nurse examines the breasts of a primiparous breastfeeding woman who is one day postpartum. An expected finding would be:

- A. Soft, non-tender; colostrum is present.
- B. Leakage of milk at let down.
- C. Swollen, warm, and tender upon palpation.
- D. A few blisters and a bruise on each areola.

Correct Answer: A. Soft, non-tender; colostrum is present.

Breasts are essentially unchanged for the first two to three days after birth. Colostrum is present and may leak from the nipples. There are distinct stages seen in milk production which start before the birth of the baby. The first milk is colostrum which is available after labor. Occasionally, there is pre-colostrum before the postpartum stage. Colostrum is high in protein, sodium, and immunoglobulins while being low in lactose, and this is the first milk produced for the baby. After 30 to 40 hours postpartum, the milk composition changes by an increase of lactose and dilution of other constituents as the volume increases.

- **Option B:** Subsequently, the maintenance of lactation follows an autonomous pattern wherein the sucking of the baby and emptying of the breast are the main factors regulating the milk flow. Baby and maternal factors can influence this bonding. Skin-to-skin contact in the first 2 hours after birth is essential for successful initiation of lactation. The breast crawl, soon after birth, while the baby is alert will initiate the bonding, and it will be an assurance by giving comfort and calm to the mother. The breast crawl is when the baby is placed on the mother's abdomen after birth; the baby finds its way to the breast to suckle.
- **Option C:** Maternal factors like pain, anxiety, emotional instability, among others should be addressed before and after delivery. Getting a correct latch on the nipple is important. If the latch is not correct due to issues such as lip tie or tongue tie, the mother can develop cracked nipples or pain while breastfeeding. An evaluation by a lactation consultant or other health professional comfortable with diagnosing lip and tongue ties may be helpful.
- **Option D:** Pain and discomfort while breastfeeding is expected. Milk produced can be classified as foremilk and hindmilk. Foremilk contains higher levels of lactose while hindmilk contains a higher proportion of proteins and fats. The baby's nutritional need controls the milk quantity and components. The knowledge of high lactose foremilk and high fat of hindmilk will help the mother to regulate the feed from both breasts.

53. You are initiating a nursing care plan for a patient with pneumonia. Which intervention for cough enhancement should you delegate to a nursing assistant?

- A. Teaching the patient about the importance of adequate fluid intake and hydration.
- B. Assisting the patient to a sitting position with neck flexed, shoulders relaxed, and knees flexed.
- C. Reminding the patient to use an incentive spirometer every 1 to 2 hours while awake.
- D. Encouraging the patient to take a deep breath, hold it for 2 seconds, then cough two or three times in succession.

Correct Answer: C. Reminding the patient to use an incentive spirometer every 1 to 2 hours while awake

A nursing assistant can remind the patient to perform actions that are already part of the plan of care. The right person must be assigned to the right tasks and jobs under the right circumstances. The nurse who assigns the tasks and jobs must then communicate with and direct the person doing the task or job. The nurse supervises the person and determines whether or not the job was done in the correct, appropriate, safe and competent manner.

- **Option A:** Teaching patients about adequate fluid intake requires additional education and skill and is within the scope of practice of the RN. Among the tasks that cannot be legally and appropriately delegated to nonprofessional, unlicensed assistive nursing personnel, such as nursing assistants, patient care technicians, and personal care aides, include assessments, nursing diagnosis, establishing expected outcomes, evaluating care and any and all other tasks and aspects of care including but not limited to those that entail sterile technique, critical thinking, professional judgment and professional knowledge.
- **Option B:** Assisting the patient in the best position to facilitate coughing requires specialized knowledge and understanding that is beyond the scope of practice of the basic nursing assistant. However, an experienced nursing assistant could assist the patient with positioning after the nursing assistant and the patient had been taught the proper technique. The nursing assistant would still be under the supervision of the RN.
- **Option D:** Discussing and teaching require additional education and training. These actions are within the scope of practice of the RN. The client is the center of care. The needs of the client must be competently met with the knowledge, skills and abilities of the staff to meet these needs.

54. A 29-year-old female client, who is a professional dancer, presents to the emergency department after a performance complaining of severe lower abdominal pain, fever, and an unusual vaginal discharge. She mentions that she had similar symptoms two months ago and was treated in an urgent care clinic. She also reports having multiple sexual partners in the past year and inconsistent condom use. Given the clinical presentation and her history, which of the following infections is most frequently associated with a recurrence of pelvic inflammatory disease (PID)?

- A. Trichomoniasis
- B. Chlamydia
- C. Staphylococcus

- D. Streptococcus
- E. Gonorrhea
- F. Escherichia coli

Correct Answer: B. Chlamydia

Pelvic inflammatory disease (PID) is an infection of the female reproductive organs. It's usually caused by a sexually transmitted infection. Chlamydia and gonorrhea are the most common causes of PID. Among these options, Chlamydia is the most frequently associated with PID. It's essential to diagnose and treat Chlamydia promptly as it can lead to serious complications if left untreated, including infertility.

55. A patient with acute respiratory distress syndrome (ARDS) is receiving oxygen by a non-rebreather mask, but arterial blood gas measurements still show poor oxygenation. As the nurse responsible for this patient's care, you would anticipate a physician order for what action?

- A. Perform endotracheal intubation and initiate mechanical ventilation.
- B. Immediately begin continuous positive airway pressure (CPAP) via the patient's nose and mouth.
- C. Administer furosemide (Lasix) 100 mg IV push stat.
- D. Call a code for respiratory arrest.

Correct Answer: A. Perform endotracheal intubation and initiate mechanical ventilation

A non-rebreather mask can deliver nearly 100% oxygen. When the patient's oxygenation status does not improve adequately in response to the delivery of oxygen at this high concentration, refractory hypoxemia is present. Usually, at this stage, the patient is working very hard to breathe and may go into respiratory arrest unless healthcare care providers intervene by providing intubation and mechanical ventilation to decrease the patient's work of breathing.

- **Option B:** To maintain oxygenation, ARDSnet recognizes the benefit of PEEP. The protocol allows for a low or a high PEEP strategy relative to FiO₂. Either strategy tolerates a PEEP of up to 24 cm HO in patients requiring 100% FiO₂. Interestingly, the mode in which a patient is ventilated affects lung recovery. Evidence suggests that some ventilatory strategies can exacerbate alveolar damage and perpetuate lung injury in the context of ARDS.
- **Option C:** The chief treatment strategy is supportive care and focuses on 1) reducing shunt fraction, 2) increasing oxygen delivery, 3) decreasing oxygen consumption, and 4) avoiding further injury. Patients are mechanically ventilated, guarded against fluid overload with diuretics, and given nutritional support until evidence of improvement is observed.
- **Option D:** The major cause of death in patients with ARDS was sepsis or multiorgan failure. While mortality rates are now around 9% to 20%, it is much higher in older patients. ARDS has significant morbidity as these patients remain in the hospital for extended periods and have significant weight loss, poor muscle function, and functional impairment.

56. Which of the following is the primary reason to teach pursed-lip breathing to clients with emphysema?

- A. To promote oxygen intake.
- B. To strengthen the diaphragm.

- C. To strengthen the intercostal muscles.
- D. To promote carbon dioxide elimination.

Correct Answer: D. To promote carbon dioxide elimination.

Pursed lip breathing prolongs exhalation and prevents air trapping in the alveoli, thereby promoting carbon dioxide elimination. By prolonged exhalation and helping the client relax, pursed-lip breathing helps the client learn to control the rate and depth of respiration. Pursed-lip breathing does not promote the intake of oxygen, strengthen the diaphragm, or strengthen intercostal muscles.

- **Option A:** For those suffering from chronic obstructive pulmonary disease, the ability to take in oxygen is a constant struggle. It's possible to increase oxygen levels in other ways, such as cellular therapy. Cellular therapy may promote the healing of lung tissue, potentially improving lung function. When lung function improves, the client is able to take in more oxygen as well as expel carbon dioxide because the lungs are working more effectively.
- **Option B:** Diaphragmatic breathing is a type of a breathing exercise that helps strengthen the diaphragm, an important muscle that helps us breathe. This breathing exercise is also sometimes called belly breathing or abdominal breathing.
- **Option C:** Breathing exercises slowly fill the lungs with air to expand the chest and work the intercostal muscles. To do this exercise, it is typically recommended to sit or stand with the back straight, then take a full breath from the bottom of the lungs. It can help to think of breathing from the diaphragm, by slowly expanding the abdominal muscles while inhaling, then pushing air from the lungs using these same muscles.

57. The nurse is admitting a client with newly diagnosed diabetes mellitus and left-sided heart failure. Assessment reveals low blood pressure, increased respiratory rate and depth, drowsiness, and confusion. The client complains of headache and nausea. Based on the serum laboratory results below, how would the nurse interpret the client's acid-base balance? Lab Results: pH: 7.34 HCO₃⁻: 19 mEq/L PaCO₂: 35 mm Hg PaO₂: 88 mm Hg Potassium: 5.3 mEq/L Chloride: 102 mEq/L Calcium: 10.4 mg/dl Anion gap: 30 mEq/L

- A. Metabolic alkalosis.
- B. Metabolic acidosis.
- C. Respiratory acidosis.
- D. Respiratory alkalosis.

Correct Answer: B. Metabolic acidosis.

This client has metabolic acidosis, which typically manifests with a low pH, low bicarbonate level, normal to low PaCO₂, and normal PaO₂. The client's serum electrolyte levels also support metabolic acidosis, which include an elevated potassium level, normal to elevated chloride level, and normal calcium level. The client's anion gap of 30 mEq/L is high, also indicative of metabolic acidosis. This kind of metabolic acidosis occurs with diabetic ketoacidosis and other disorders.

- **Option A:** Normal human physiological pH is 7.35 to 7.45. A decrease in pH below this range is acidosis, an increase over this range is alkalosis. Metabolic alkalosis is defined as a disease state where the body's pH is elevated to greater than 7.45 secondary to some metabolic process. Associated electrolyte abnormalities need to be identified, including hypochloremia, hypokalemia, and hypocalcemia.

- **Option C:** Respiratory acidosis is a state in which there is usually a failure of ventilation and an accumulation of carbon dioxide. The primary disturbance of elevated arterial PCO₂ is the decreased ratio of arterial bicarbonate to arterial PCO₂, which leads to a lowering of the pH. In respiratory acidosis, the ABG will show an elevated PCO₂ (>45 mmHg), elevated HCO₃⁻ (>30 mmHg), and decreased pH (<7.35).
- **Option D:** Acute respiratory alkalosis is associated with high bicarbonate levels since there has not been sufficient time to lower the HCO₃ levels and chronic respiratory alkalosis is associated with low to normal HCO₃ levels. Serum electrolytes should be measured with particular attention to sodium, potassium, and calcium levels as aberrations in these may lead to further complication. Magnesium and phosphate are also essential to measure.

58. A toddler has recently been diagnosed with cerebral palsy. Which of the following information should the nurse provide to the parents? Select all that apply.

- A. Regular developmental screening is important to avoid secondary developmental delays.
- B. Cerebral palsy is caused by injury to the upper motor neurons and results in motor dysfunction, as well as possible ocular and speech difficulties.
- C. Developmental milestones may be slightly delayed but usually will require no additional intervention.
- D. Parent support groups are helpful for sharing strategies and managing health care issues.
- E. Therapies and surgical interventions can cure cerebral palsy.

Correct Answer: A, B, and D.

Delayed developmental milestones are characteristic of cerebral palsy, so regular screening and intervention is essential. Because of injury to upper motor neurons, children may have ocular and speech difficulties. Parent support groups help families to share and cope. Physical therapy and other interventions can minimize the extent of the delay in developmental milestones.

- **Option A:** During a developmental screening, a short test is given to see if the child has specific developmental delays, such as motor or movement delays. If the results of the screening test are cause for concern, then the doctor will make referrals for developmental and medical evaluations.
- **Option B:** Cerebral palsy (CP) is a group of disorders that affect a person's ability to move and maintain balance and posture. CP is the most common motor disability in childhood. Cerebral means having to do with the brain. Palsy means weakness or problems with using the muscles. CP is caused by abnormal brain development or damage to the developing brain that affects a person's ability to control his or her muscles.
- **Option C:** Delayed developmental milestones definitely need interventions and constant follow ups. Developmental monitoring (also called surveillance) means tracking a child's growth and development over time. If any concerns about the child's development are raised during monitoring, then a developmental screening test should be given as soon as possible.
- **Option D:** Both early intervention and school-aged services are available through a special education law—the Individuals with Disabilities Education Act (IDEA). Part C of IDEA deals with early intervention services (birth through 36 months of age), while Part B applies to services for school-aged children (3 through 21 years of age). Even if the child has not been diagnosed with CP, he or she may be eligible for IDEA services.
- **Option E:** Cerebral palsy has no cure, but treatment can improve the lives of those who have the condition. After a CP diagnosis is made, a team of health professionals works with the child and

family to develop a plan to help the child reach his or her full potential. Common treatments include medicines; surgery; braces; and physical, occupational, and speech therapy. No single treatment is the best one for all children with CP. Before deciding on a treatment plan, it is important to talk with the child's doctor to understand all the risks and benefits.

59. Which of the following is the most important physical assessment parameter the nurse would consider when assessing fluid and electrolyte imbalance?

- A. Skin turgor
- B. Intake and output
- C. Osmotic pressure
- D. Cardiac rate and rhythm

Correct Answer: D. Cardiac rate and rhythm

Cardiac rate and rhythm are the most important physical assessment parameter to measure. Skin turgor, intake, and output are physical assessment parameters a nurse would consider when assessing fluid and electrolyte imbalance, but choice d is the most important. Tachycardia and hypertension are common manifestations. Tachypnea is usually present with or without dyspnea. Elevated CVP may be noted before dyspnea and adventitious breath sounds occur. Hypertension may be a primary disorder or occur secondary to other associated conditions such as heart failure.

- **Option A:** Skin turgor is a sign of fluid loss (dehydration). Diarrhea or vomiting can cause fluid loss. Infants and young children with these conditions can rapidly lose a lot of fluid if they do not take enough water. Fever speeds up this process. To check for skin turgor, the health care provider grasps the skin between two fingers so that it is tented up. Commonly on the lower arm or abdomen is checked. The skin is held for a few seconds then released.
- **Option B:** These measurements are important to help evaluate a person's fluid and electrolyte balance, to suggest various diagnoses and allows for a prompt intervention to correct the imbalance. Records of all intake and output must be kept meticulously in an Intake and Output Chart (I/O Chart).
- **Option C:** Osmosis is the diffusion of water across a membrane in response to osmotic pressure caused by an imbalance of molecules on either side of the membrane. Osmoregulation is the process of maintenance of salt and water balance (osmotic balance) across membranes within the body's fluids, which are composed of water, plus electrolytes, and non-electrolytes.

60. A client's blood gases reflect diabetic acidosis. The nurse should expect:

- A. Increased pH
- B. Decreased PO₂
- C. Increased PCO₂
- D. Decreased HCO₃

Correct Answer: D. Decreased HCO₃

The bicarbonate-carbonic acid buffer system helps maintain the pH of the body fluids; in metabolic acidosis, there is a decrease in bicarbonate because of an increase of metabolic acids. Acidosis in DKA

is due to the overproduction of β -hydroxybutyric acid and acetoacetic acid. At physiological pH, these 2 keto acids dissociate completely, and the excess hydrogen ions bind the bicarbonate, resulting in decreased serum bicarbonate levels.

- **Option A:** Due to carbon dioxide forming carbonic acid in the body when combining with water, the amount of carbon dioxide expired can cause pH to increase or decrease. If bicarbonate is reabsorbed and/or acid is secreted into the urine, the pH becomes more alkaline (increases).
- **Option B:** If a PaO₂ level is lower than 80 mmHg, it means that a person is not getting enough oxygen. A low PaO₂ level can point to an underlying health condition, such as emphysema, chronic obstructive pulmonary disease, or COPD, pulmonary fibrosis.
- **Option C:** PaCO₂ level determines respiratory contribution; a high level means the respiratory system is lowering the pH and vice versa. Due to carbon dioxide forming carbonic acid in the body when combining with water, the amount of carbon dioxide expired can cause pH to increase or decrease.

61. A client who had a “Do Not Resuscitate” order passed away. After verifying there is no pulse or respirations, the nurse should next:

- A. Have family members say goodbye to the deceased.
- B. Call the transplant team to retrieve vital organs.
- C. Remove all tubes and equipment (unless organ donation is to take place), clean the body, and position appropriately.
- D. Call the funeral director to come and get the body.

Correct Answer: C. Remove all tubes and equipment (unless organ donation is to take place), clean the body, and position appropriately.

The body of the deceased should be prepared before the family comes into view and says their goodbyes. This includes removing all equipment, tubes, supplies, and dirty linens according to protocol, bathing the client, applying clean sheets, and removing trash from the room. In a home care, the nurse would ask the family if it was alright to remove any tubes or catheters from the patient, and if they would like to assist in bathing/preparing the patient for transport to the funeral home. The nurse would assist the family in removing any jewelry or other items from the patient. Be sure to maintain the highest dignity and respect for the deceased patient during this post-mortem care.

- **Option A:** When the death is imminent, the family must be informed that death is near. As mentioned before, sometimes this is shocking to the family, despite knowing that their loved one is dying. This has to be communicated to the family in a sensitive and calm manner. Each nurse will have their own way to exchange this information, but it is very important that the family be told that death can occur at any time so that they can prepare. There may be a family in the area or out of town that would like to come and see the patient and who is waiting until the patient gets closer to death.
- **Option B:** Correct information given to a family clearly, sensitively, and in a professional manner can accommodate relatives' understanding of why their loved one is in a critical condition, which can help them accept death and therefore consider the option of organ donation. Nurses must acquire through regular training specific skills and knowledge in order to practice efficiently and adhere to the needs of a dying patient's family.
- **Option D:** Following the death of a patient, the nurse should offer their condolences to the family and extend assistance with contacting any other family members or individuals the family requests. Depending on the location of the death, the nurse would contact the medical examiner to notify

them of the death, as well as the physician and other clinicians who were involved with the patient. The nurse can also contact the funeral home for the family as requested.

62. Which statement by the client during the initial assessment in the emergency department is most indicative of suspected domestic violence?

- A. "I am determined to leave my house in a week."
- B. "No one else in the family has been treated like this."
- C. "I have only been married for two (2) months."
- D. "I have tried leaving, but have always gone back."

Correct Answer: D. "I have tried leaving, but have always gone back."

Victims develop a high tolerance for abuse. They blame themselves for being victimized. All members of the family suffer from the effects of abuse, even if they are not the actual victims. For these reasons, victims often have an extensive history of abuse and struggle for a long time before they can leave permanently.

- **Option A:** Even when victims decide to leave, it takes them 5 attempts on average before they succeed (Stroshine & Robinson, 2003). Furthermore, some of the problems persist even after they leave (i.e. harassment and violence from the abuser).
- **Option B:** If motivated to do so, victims can learn to overcome learned helplessness, which leads to depression, inadequate problem solving and loss of self-esteem (Lysaker, Clements, Wright, Evans, & Marks, 2001). In certain immigrant communities that do not condone intimate partner abuse, victims can become completely isolated and will need help moving on with their lives (Raj & Silverman, 2003). In general, victims need help creating models of abuse-free relationships with or without their partners, and finding social support that can enhance their independence and self-efficacy.
- **Option C:** Sometimes, victims do not leave because they want to provide a family for their children, depend on the abuser financially, emotionally or their religion forbids them from breaking up a marriage. Mental health professionals usually help victims decide whether to stay or leave the relationship, find shelter if they do decide to leave as well as provide training for skills necessary for independent living.

63. A nurse is preparing to obtain a sputum specimen from a client. Which of the following nursing actions will facilitate obtaining the specimen?

- A. Limiting fluids.
- B. Having the client take 3 deep breaths.
- C. Asking the client to spit into the collection container.
- D. Asking the client to obtain the specimen after eating.

Correct Answer: B. Having the client take 3 deep breaths.

To obtain a sputum specimen, the client should rinse the mouth to prevent contamination, breathe deeply, and then cough into a sputum specimen container. To cough deeply from the lungs, the client might need to take three deep breaths before he coughs forcefully.

- **Option A:** Sputum can be thinned by fluids or by a respiratory treatment such as inhalation of nebulized saline or water. Drinking plenty of fluids can help loosen the secretions and make it easier to cough up sputum. The doctor may ask to rinse out the mouth with clear water to help get rid of any other bacteria and extra saliva.
- **Option C:** The client should be encouraged to cough and not spit so as to obtain sputum. He should take a deep breath and hold the air for 5 seconds then slowly breathe out. Then, he should take another deep breath and cough hard until the sputum comes out.
- **Option D:** The optimal time to obtain a specimen is on rising in the morning. Upon waking up in the morning, before eating or drinking anything, the client should brush his teeth and rinse with water. Mouthwash should never be used.

64. During a client's urinary bladder catheterization, the bladder is emptied gradually. The best rationale for the nurse's action is that completely emptying an overdistended bladder at one time tends to cause:

- A. Renal failure
- B. Abdominal cramping
- C. Possible shock
- D. Atrophy of bladder musculature

Correct Answer: C. Possible shock

Rapid emptying of an overdistended bladder may cause hypotension and shock due to the sudden change of pressure within the abdominal viscera. Previously, removing no more than 1,000 ml at one time was the standard of practice, but this is no longer thought to be necessary as long as the overdistended bladder is emptied slowly.

- **Option A:** Hematuria, hypotension, and postobstructive diuresis can occur after bladder drainage by catheter, and the risk of these complications has been thought to be increased when the bladder is rapidly decompressed; however, there are reports supporting gradual bladder decompression to avoid hematuria, hypotension, and post obstructive diuresis, the evidence is overall weak.
- **Option B:** A Foley was used for urethral catheterization. The bladder is catheterized in the normal way under aseptic conditions using a two-way Foley catheter. Patients were evaluated for pain (treatment success), hematuria, and hypotension. Pain was assessed as present or absent. The assessment was done using pain analog scores.
- **Option D:** Gradual release of the obstructed bladder continues to be recommended as the method of choice based on a theory that slow decompression of the intrabladder pressure will reduce the rate of complications, specifically hematuria, and hypotension.

65. A 72-year-old client with a history of recurrent urinary tract infections and recent complaints of flank pain is scheduled for KUB (Kidney, Ureter, Bladder) radiography in an outpatient setting. The client is anxious and mentions reading various preparation methods online. Given the client's age, history, and concerns, which of the following actions should the nurse take to adequately prepare the client for the test? Select all that apply.

- A. Instruct the client that they must be NPO for 6 hours before the examination.

- B. Administer an enema the evening before the examination to ensure clear imaging.
- C. Administer furosemide 20 mg IV half an hour before the examination to enhance visualization.
- D. Reassure the client and inform them that no special preparation is needed for this examination.
- E. Ask the client to drink fluids and empty the bladder just prior to the examination to ensure a clear view.
- F. Check for any allergies to contrast, even though it's not typically used in a standard KUB.
- G. Advise the client to wear loose-fitting clothing without any metal objects for the examination.

Correct Answers: D & E.

A KUB radiography is a diagnostic imaging test that provides a view of the kidneys, ureters, and bladder. Typically, no special preparation is needed for this examination. However, asking the client to drink fluids and then empty the bladder just before the test can help ensure a clear view of the urinary structures. The other options, such as being NPO, administering an enema, or giving furosemide, are not standard preparations for a KUB.

66. When preparing a client for discharge after surgery for a CABG, the nurse should teach the client that there will be:

- A. No further drainage from the incisions after hospitalizations.
- B. A mild fever and extreme fatigue for several weeks after surgery.
- C. Little incisional pain and tenderness after 3 to 4 weeks after surgery.
- D. Some increase in edema in the leg used for the donor graft when activity increases.

Correct Answer: D. Some increase in edema in the leg used for the donor graft when activity increases

The client is up more at home, so dependent edema usually increases. Serosanguineous drainage may persist after discharge. After surgery, it takes 4 to 6 weeks to completely heal and start feeling better. It is normal to have swelling in the leg that the vein graft was taken from.

- **Option A:** Shower every day, washing the incision gently with soap and water. DO NOT swim, soak in a hot tub, or take baths until your incision is completely healed. Follow a heart-healthy diet.
- **Option B:** Continue to take all medicines for the heart, diabetes, high blood pressure, or any other condition. Do not stop taking any medicine without first talking with the provider. The provider may recommend antiplatelet (blood-thinning) drugs such as aspirin, clopidogrel (Plavix), prasugrel (Effient), or ticagrelor (Brilinta) to help keep your artery graft open.
- **Option C:** Do not drive for at least 4 to 6 weeks after the surgery. The twisting involved in turning the steering wheel may pull on the incision. Stop if feeling short of breath, dizzy, or any pain in the chest. Do not do any activity or exercise that causes pulling or pain across the chest, such as using a rowing machine or weight lifting.

67. Nurse Vic is monitoring the fluid intake and output of a female client recovering from an exploratory laparotomy. Which nursing intervention would help the client avoid a urinary tract infection (UTI)?

- A. Maintaining a closed indwelling urinary catheter system and securing the catheter to the leg.

- B. Limiting fluid intake to 1 L/day.
- C. Encouraging the client to use a feminine deodorant after bathing.
- D. Encouraging the client to douche once a day after removal of the indwelling urinary catheter.

Correct Answer: A. Maintaining a closed indwelling urinary catheter system and securing the catheter to the leg.

Maintaining a closed indwelling urinary catheter system helps prevent introduction of bacteria; securing the catheter to the client's leg also decreases the risk of infection by helping to prevent urethral trauma.

- **Option B:** To flush bacteria from the urinary tract, the nurse should encourage the client to drink at least 10 glasses of fluid daily, if possible. Encouraged increased oral fluid intake (2 to 3 liters a day if no contraindication). Fluid intake facilitates urine production and flushes bacteria from the urinary tract.
- **Option C:** Encouraged the client to void often every 2 to 3 hours a day and completely empty the bladder. This will prevent bladder distention, facilitate flushing of the bacteria and avoid reinfection. Feminine deodorants may irritate the urinary tract.
- **Option D:** Douching may irritate the urinary tract and should be discouraged. Suggest drinking cranberry juice (four to six 8 ounce glasses per day). Cranberry juice has been shown to reduce adherence of bacteria to the uroepithelial cells in the urinary tract.

68. Priorities are established to help the nurse anticipate and sequence nursing interventions when a client has multiple problems or alterations. Priorities are determined by the client's:

- A. Physician
- B. Non-Emergent, non-life-threatening needs
- C. Future well-being.
- D. Urgency of problems

Correct Answer: D. Urgency of problems

Triage of patients involves looking for signs of serious illness or injury. These emergency signs are connected to the Airway – Breathing – Circulation/Consciousness – Dehydration and are easily remembered as ABCD. If the client does not have any emergency signs, the health worker proceeds to assess the client for priority conditions. This should not take more than a few seconds. Some of these signs will have been noticed during the ABCD triage and others need to be rechecked.

- **Option A:** All clinical staff involved in the care of the sick should be prepared to carry out a rapid assessment to identify the few clients who are severely ill and require emergency treatment.
- **Option B:** Triage is the process of rapidly examining sick children when they first arrive in order to place them in one of the following categories: those with EMERGENCY SIGNS who require immediate emergency treatment; those with PRIORITY SIGNS who should be given priority in the queue so they can be rapidly assessed and treated without delay; and those who have no emergency or priority signs and are NON-URGENT cases. These clients can wait their turn in the queue for assessment and treatment. The majority of sick clients will be non-urgent and will not require emergency treatment.
- **Option C:** Ideally, all clients should be checked on their arrival by a person who is trained to assess how ill they are. This person decides whether the client will be seen immediately and

receive life-saving treatment, or will be seen soon, or can safely wait for his or her turn to be examined.

69. Your patient has complaints of severe right-sided flank pain, nausea, vomiting, and restlessness. He appears slightly pale and is diaphoretic. Vital signs are BP 140/90 mmHg, Pulse 118 beats/min., respirations 33 breaths/minute, and temperature, 98.0F. Which subjective data supports a diagnosis of renal calculi?

- A. Pain radiating to the right upper quadrant.
- B. History of mild flu symptoms last week.
- C. Dark-colored coffee-ground emesis.
- D. Dark, scanty urine output.

Correct Answer: A. Pain radiating to the right upper quadrant.

Patients with renal calculi will most likely report acute, severe flank pain that will often radiate to the abdomen and especially to the groin, testicle, and labia. It is often sharp and severe in nature. It may also be colicky. The pain is often associated with nausea and vomiting which is due to the embryological origins of the urogenital tract.

- **Option B:** If infected, patients may also present with fever, chills, or other systemic signs of infection. This condition, called pyonephrosis or obstructive pyelonephritis, is potentially severe and life-threatening, requiring emergency decompression surgery.
- **Option C:** Patients often present with hematuria as 85% of patients demonstrate at least microscopic hematuria on urinalysis. The physical exam may reveal costovertebral tenderness and hypoactive bowel sounds. The testis and pubic area may also be tender to touch. Fever is rarely seen in renal colic but the presence of fever, pyuria, and leukocytosis may be indicative of pyelonephritis.
- **Option D:** Patients with renal calculi commonly have blood in the urine caused by the stone's passage through the urinary tract. The urine appears dark, tests positive for blood, and is typically scant. Renal calculi are a common cause of blood in the urine (hematuria) and pain in the abdomen, flank, or groin. They occur in one in 11 people at some time in their lifetimes with men affected 2 to 1 over women.

70. Which of the following outcome criteria is appropriate for the client with dementia?

- A. The client will return to an adequate level of self-functioning.
- B. The client will learn new coping mechanisms to handle anxiety.
- C. The client will seek out resources in the community for support.
- D. The client will follow an established schedule for activities of daily living.

Correct Answer: D. The client will follow an established schedule for activities of daily living.

Following established activity schedules is a realistic expectation for clients with dementia. Maintain a regular daily schedule routine to prevent problems that may result from thirst, hunger, lack of sleep, or inadequate exercise. If the needs of a patient with AD are not met, it may cause the patient to become

agitated and anxious. Predictable behavior is less threatening to the patient and does not tax limited ability to function with ADLs.

- **Option A:** Allow the patient the freedom to sit in a chair near the window, utilize books and magazines as desired. This validates the patient's sense of reality and assists the patient in differentiating between day and night. Respect for the patient's personal space allows the patient to exert some control.
- **Option B:** Allow hoarding and wandering in a controlled environment, as appropriate or within acceptable limitations. Increases patient's security and decreases hostility and agitation by permitting behaviors that are difficult to prevent, to be allowed within the confines of a safe supervised environment.
- **Option C:** Instruct family members in the disease process, what can be expected, and assist with providing a list of community resources for support. Once diagnosis of AD is made, the family should be prepared to make long-term plans in order to discuss problems before they arise. Choices for resuscitation, legal competency, and guardianship including financial responsibility needed to be addressed. The care of a person with AD is expensive and time-consuming, as well as energy-draining and emotionally devastating for the family. Community resources can help delay the need for placement in a long-term care facility and may help defray some costs.

71. The nurse wishes to identify nursing diagnoses for a patient. She can best do this by using a data collection form organized according to: Select all that apply.

- A. A body systems model
- B. A head-to-toe framework
- C. Maslow's hierarchy of needs
- D. Gordon's functional health patterns
- E. Adaptation Model of Nursing

Correct Answer: C & D

Nursing models produce a holistic database that is useful in identifying nursing rather than medical diagnoses. Body systems and Maslow's hierarchy is not a nursing model, but it is holistic, so it is acceptable for identifying nursing diagnoses. Gordon's functional health patterns are a nursing model.

- **Option A:** A body system model is not a nursing model. It is a representation of all the systems of the body in a figurine.
- **Option B:** Head-to-toe framework is not a nursing model, and they are not holistic; they focus on identifying physiological needs or disease.
- **Option C:** Maslow's hierarchy of needs is a motivational theory in psychology comprising a five-tier model of human needs, often depicted as hierarchical levels within a pyramid. From the bottom of the hierarchy upwards, the needs are: physiological (food and clothing), safety (job security), love and belonging needs (friendship), esteem, and self-actualization.
- **Option D:** Gordon's functional health patterns is a method devised by Marjory Gordon to be used by nurses in the nursing process to provide a more comprehensive nursing assessment of the patient.
- **Option E:** The Adaptation Model of Nursing is a prominent nursing theory aiming to explain or define the provision of nursing science. In her theory, Sister Callista Roy's model sees the

individual as a set of interrelated systems that strives to maintain a balance between various stimuli.

72. A client with frequent urinary tract infections asks the nurse how she can prevent the recurrence. The nurse should teach the client to:

- A. Douche after intercourse
- B. Void every 3 hours
- C. Obtain a urinalysis monthly
- D. Wipe from back to front after voiding

Correct Answer: B. Void every 3 hours

Voiding every 3 hours prevents stagnant urine from collecting in the bladder, where bacteria can grow.

- **Options A and C:** Douching is not recommended and obtaining a urinalysis monthly is not necessary.
- **Option D:** The client should practice wiping from front to back after voiding and bowel movements.

73. An incoherent female client with a history of hypothyroidism is brought to the emergency department by the rescue squad. Physical and laboratory findings reveal hypothermia, hypoventilation, respiratory acidosis, bradycardia, hypotension, and nonpitting edema of the face and pretibial area. Knowing that these findings suggest severe hypothyroidism, nurse Libby prepares to take emergency action to prevent the potential complication of:

- A. Thyroid storm.
- B. Cretinism.
- C. Myxedema coma.
- D. Hashimoto's thyroiditis.

Correct Answer: C. Myxedema coma.

Severe hypothyroidism may result in myxedema coma, in which a drastic drop in the metabolic rate causes decreased vital signs, hypoventilation (possibly leading to respiratory acidosis), and nonpitting edema. Patients are most commonly presenting for emergency services with altered mental status and hypothermia, below 35.5 degrees C (95.9 degrees F). The lower the body temperature, the worst is the prognosis. The absence of mild diastolic hypertension in severely hypothyroid patients is a warning sign of impending myxedema coma.

- **Option A:** Thyroid storm is an acute complication of hyperthyroidism. Thyroid storm, also known as thyrotoxic crisis, is an acute, life-threatening complication of hyperthyroidism. It is an exaggerated presentation of thyrotoxicosis. It comes with sudden multisystem involvement.
- **Option B:** Cretinism is a form of hypothyroidism that occurs in infants. Congenital hypothyroidism (CH) is defined as thyroid hormone deficiency present at birth. CH must be diagnosed promptly because delay in treatment can lead to irreversible neurological deficits. Before the newborn screening program, CH was one of the most common preventable causes of intellectual disability.

- **Option D:** Hashimoto's thyroiditis is a common chronic inflammatory disease of the thyroid gland in which autoimmune factors play a prominent role. Hashimoto thyroiditis is an autoimmune disease that destroys thyroid cells by cell and antibody-mediated immune processes. It is the most common cause of hypothyroidism in developed countries. This disease is also known as chronic autoimmune thyroiditis and chronic lymphocytic thyroiditis. The pathology of the disease involves the formation of antithyroid antibodies that attack the thyroid tissue, causing progressive fibrosis.

74. He wants to influence the customary way of thinking and behaving that is shared by the members of the department. Which of the following terms refer to this?

- A. Organizational chart
- B. Cultural network
- C. Organizational structure
- D. Organizational culture

Correct Answer: D. Organizational culture

Organizational culture refers to the way the members of the organization think together and do things around them together. It's their way of life in that organization. An organization's culture defines the proper way to behave within the organization. This culture consists of shared beliefs and values established by leaders and then communicated and reinforced through various methods, ultimately shaping employee perceptions, behaviors, and understanding.

- **Option A:** An organizational chart is a diagram that visually conveys a company's internal structure by detailing the roles, responsibilities, and relationships between individuals within an entity. Organizational charts are alternatively referred to as "org charts" or "organization charts."
- **Option B:** A cultural network hierarchy is presented which classifies these tools according to the CEO's personal involvement with each element. Guidelines are presented for using the tools of cultural communication to change or maintain the culture at both the managerial level and the operational level of the organization.
- **Option C:** An organizational structure is a system that outlines how certain activities are directed in order to achieve the goals of an organization. These activities can include rules, roles, and responsibilities. The organizational structure also determines how information flows between levels within the company.

75. Which of the following symptoms best describes Murphy's sign?

- A. Periumbilical ecchymosis exists.
- B. On deep palpation and release, pain elicited.
- C. On deep inspiration, pain is elicited and breathing stops.
- D. Abdominal muscles are tightened in anticipation of palpation.

Correct Answer: C. On deep inspiration, pain is elicited and breathing stops.

Murphy's sign is elicited when the client reacts to pain and stops breathing. It's a common finding in clients with cholecystitis. Murphy's sign is elicited in patients with acute cholecystitis by asking the patient to take in and hold a deep breath while palpating the right subcostal area. If pain occurs on

inspiration, when the inflamed gallbladder comes into contact with the examiner's hand, Murphy's sign is positive.

- **Option A:** Periumbilical ecchymosis, Cullen's sign, is present in peritonitis. Cullen sign manifests as superficial edema with bruising in the subcutaneous fatty tissue around the periumbilical region. Originally described in association with ectopic pregnancy.
- **Option B:** Pain on deep palpation and release is rebound tenderness. Blumberg's sign (also referred to as rebound tenderness or the Shyotkin-Blumberg sign) is a clinical sign in which there is pain upon removal of pressure rather than the application of pressure to the abdomen. (The latter is referred to simply as abdominal tenderness.) It is indicative of peritonitis.
- **Option D:** Tightening up abdominal muscles in anticipation of palpation is guarding. Investigations of relationships of specific pain behaviors with pain intensity and fear of movement are rare. Guarding, defined as "behavior that is aimed at preventing or alleviating pain" and which includes stiffness, hesitation, and bracing, has been shown to predict work loss over 3 months in injured workers.

76. Drew is diagnosed with Type I diabetes mellitus. As a nurse taking care of the client, you should know that in his condition:

- A. Insulin is produced but is malformed.
- B. The beta cells of the pancreas stop producing insulin.
- C. The client cannot be treated.
- D. Diagnosis is made in clients over age 50.

Correct Answer: B. The beta cells of the pancreas stop producing insulin.

In type I diabetes mellitus, the beta cells stop producing insulin completely. T1DM is characterized by the destruction of beta cells in the pancreas, typically secondary to the autoimmune destruction of beta cells. The result is the absolute destruction of beta cells, and consequentially, insulin is absent or extremely low.

- **Option A:** There is no such pathophysiologic process as malformed insulin. A patient with DM has the potential for hyperglycemia. The pathology of DM can be unclear since several factors can often contribute to the disease. Hyperglycemia alone can impair pancreatic beta-cell function and contributes to impaired insulin secretion. Consequentially, there is a vicious cycle of hyperglycemia leading to the impaired metabolic state. Blood glucose levels above 180 mg/dL are often considered hyperglycemic in this context, though because of the variety of mechanisms, there is no clear cutoff point.
- **Option C:** Clients with type I diabetes can be treated with insulin. Since T1DM is a disease primarily due to the absence of insulin, insulin administration through daily injections, or an insulin pump, is the mainstay of treatment. Metformin is the first line of the prescribed diabetic medications and works by lowering basal and postprandial plasma glucose.
- **Option D:** The diagnosis can be made in clients at any age. Globally, 1 in 11 adults has DM (90% having T2DM). The onset of T1DM gradually increases from birth and peaks at ages 4 to 6 years and then again from 10 to 14 years. Approximately 45% of children present before age ten years. The prevalence in people under age 20 is about 2.3 per 1000.

77. While in the ER, a client with C8 tetraplegia develops a blood pressure of 80/40, pulse 48, and RR of 18. The nurse suspects which of the following

conditions?

- A. Autonomic dysreflexia
- B. Hemorrhagic shock
- C. Neurogenic shock
- D. Pulmonary embolism

Correct Answer: C. Neurogenic shock

Symptoms of neurogenic shock include hypotension, bradycardia, and warm, dry skin due to the loss of adrenergic stimulation below the level of the lesion. Neurogenic shock is a devastating consequence of spinal cord injury (SCI), also known as vasogenic shock. Injury to the spinal cord results in a sudden loss of sympathetic tone, which leads to the autonomic instability that is manifested in hypotension, bradyarrhythmia, and temperature dysregulation.

- **Option A:** Hypertension, bradycardia, flushing, and sweating of the skin are seen with autonomic dysreflexia. Autonomic dysreflexia is a condition that emerges after a spinal cord injury, usually when the injury has occurred above the T6 level. The higher the level of the spinal cord injury, the greater the risk with up to 90% of patients with cervical spinal or high-thoracic spinal cord injury being susceptible.
- **Option B:** Hemorrhagic shock presents with anxiety, tachycardia, and hypotension; this wouldn't be suspected without an injury. Hemorrhagic shock is due to the depletion of intravascular volume through blood loss to the point of being unable to match the tissues demand for oxygen. As a result, mitochondria are no longer able to sustain aerobic metabolism for the production of oxygen and switch to the less efficient anaerobic metabolism to meet the cellular demand for adenosine triphosphate.
- **Option D:** Pulmonary embolism presents with chest pain, hypotension, hypoxemia, tachycardia, and hemoptysis; this may be a later complication of spinal cord injury due to immobility. Pulmonary embolism (PE) occurs when there is a disruption to the flow of blood in the pulmonary artery or its branches by a thrombus that originated somewhere else.

78. 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.

79. The family of a schizophrenic client asks the nurse if there is a genetic cause of this disorder. To answer the family, which fact would the nurse cite?

- A. Conclusive evidence indicates a specific gene transmits the disorder.
- B. Incidence of this disorder is variable in all families.
- C. There is a little evidence that genes play a role in transmission.
- D. Genetic factors can increase the vulnerability for this disorder.

Correct Answer: D. Genetic factors can increase the vulnerability for this disorder.

Research shows that family history statistically increases the risk for the development of schizophrenia. Genetics also play a fundamental role – there is a 46% concordance rate in monozygotic twins and a 40% risk of developing schizophrenia if both parents are affected. The gene neuregulin (NGR1) which is involved in glutamate signaling and brain development has been implicated, alongside dysbindin (DTNBP1) which helps glutamate release, and catecholamine O-methyltransferase (COMT) polymorphism, which regulates dopamine function.

- **Option A:** However, no single gene has yet been identified. Several studies postulate that the development of schizophrenia results from abnormalities in multiple neurotransmitters, such as dopaminergic, serotonergic, and alpha-adrenergic hyperactivity or glutaminergic and GABA hypoactivity.
- **Option B:** This is incorrect because genetics plays a role in the etiology of schizophrenia. The incidence is also up to ten times greater in children of African and Caribbean migrants compared to Caucasians according to a study conducted in Britain. The association between cannabis use and psychosis has been widely studied, with recent longitudinal studies suggesting a 40% increased risk, while also suggesting a dose-effect relationship between the use of the drug and the risk of developing schizophrenia.
- **Option C:** The neurochemical abnormality hypothesis argues that an imbalance of dopamine, serotonin, glutamate, and GABA results in the psychiatric manifestations of the disease. It postulates that four main dopaminergic pathways are involved in the development of schizophrenia. This dopamine hypothesis attributes the positive symptoms of the illness to excessive activation of D2 receptors via the mesolimbic pathway, while low levels of dopamine in the nigrostriatal pathway are theorized to cause motor symptoms through their effect on the extrapyramidal system. Low mesocortical dopamine levels resulting from the mesocortical pathway are thought to elicit the

negative symptoms of the disease.

80. The client with BPH undergoes a transurethral resection of the prostate. Postoperatively, the client is receiving continuous bladder irrigations. The nurse assesses the client for signs of transurethral resection syndrome. Which of the following assessment data would indicate the onset of this syndrome?

- A. Bradycardia and confusion
- B. Tachycardia and diarrhea
- C. Decreased urinary output and bladder spasms
- D. Increased urinary output and anemia

Correct Answer: A. Bradycardia and confusion

Transurethral resection syndrome is caused by increased absorption of nonelectrolyte irrigating fluid used during surgery. The client may show signs of cerebral edema and increased intracranial pressure such as increased blood pressure, bradycardia, confusion, disorientation, muscle twitching, visual disturbances, and nausea and vomiting.

- **Option B:** The clinical spectrum ranges from asymptomatic hyponatremia to electrocardiographic changes, nausea, vomiting, convulsions, coma, alterations of vision, pulmonary edema, cardiovascular compromise, and death. Transurethral resection syndrome ("TUR syndrome") is caused by absorption of electrolyte-free irrigating fluid and consists of symptoms from the circulatory and nervous systems. The clinical picture is inconsistent and the syndrome is easily confused with other acute disorders.
- **Option C:** The severity of our patient's clinical picture, in contrast with moderate hyponatremia, could be explained by multiple factors: age, rapid decrease of sodium concentration, hyperkalemia, and probably hyperglycinemia. The pathophysiology is complex but includes four mechanisms: circulatory distress from the rapid absorption of electrolyte-free irrigating fluid, adverse effects of glycine, dilution of the protein and electrolyte concentrations of the body fluids, and disturbance of renal function.
- **Option D:** The treatment of the TUR syndrome consists of general life support and in specific treatment directed towards hypotension, hyponatremia, and anuria. Methods to lower the uptake of irrigating fluid are widely used and probably reduce the incidence of the TUR syndrome.

81. Tiffany is diagnosed with increased intracranial pressure (ICP); which of the following if stated by her parents would indicate a need for Nurse Charlie to reexplain the purpose for elevating the head of the bed at a 10 to 20-degree angle?

- A. Help alleviate headache
- B. Increase intrathoracic pressure
- C. Maintain neutral position
- D. Reduce intra-abdominal pressure.

Correct Answer: B. Increase intrathoracic pressure

Head elevation decreases, not increases, intrathoracic pressure. In most patients with intracranial hypertension, head and trunk elevation up to 30 degrees is useful in helping to decrease ICP, providing that a safe CPP of at least 70 mmHg or even 80 mmHg is maintained.

- **Option A:** Elevating the head of the bed in a child with increased ICP helps to alleviate headache which may contribute to increased ICP. Therapeutic positioning of the head (different degrees of head-of-bed elevation (HBE)) has been proposed as a low-cost and simple way of preventing secondary brain injury in these people.
- **Option C:** The position of the backrest of the bed is a simple and cheap intervention. This is important as most brain injury happens in low- and middle-income countries with relatively undeveloped health systems and few resources to deal with brain injury.
- **Option D:** Elevated intra-abdominal pressure (IAP) occurs in many clinical settings, including sepsis, severe acute pancreatitis, acute decompensated heart failure, hepatorenal syndrome, resuscitation with large volume, mechanical ventilation with high intrathoracic pressure, major burns, and acidosis.

82. Which of the following is least likely to influence the potential for a client to comply with lithium therapy after discharge?

- A. The impact of lithium on the client's energy level and lifestyle.
- B. The need for consistent blood level monitoring.
- C. The potential side effects of lithium.
- D. What do the client's friends think of his need to take medication.

Correct Answer: D. What do the client's friends think of his need to take medication.

While the client's social network can influence the client in terms of compliance, the influence is typically secondary to that of the other factors listed. Lithium acts on a person's central nervous system (brain and spinal cord). Doctors don't know exactly how lithium works to stabilize a person's mood, but it is thought to help strengthen nerve cell connections in brain regions that are involved in regulating mood, thinking, and behavior.

- **Option A:** The impact of lithium on the client's energy level and lifestyle are great determinants to compliance. as your body gets used to lithium, these side effects should wear off. If these symptoms do not get better within a week or two, your doctor may either reduce your dose or increase it more slowly. If that does not work you may need to switch to a different medicine.
- **Option B:** The frequent blood level monitoring required is difficult for clients to follow for a long period of time. Check with the doctor right away if there is anxiety, restlessness, a fast heartbeat, fever, sweating, muscle spasms, twitching, nausea, vomiting, diarrhea, or see or hear things that are not there. These may be symptoms of a serious condition called serotonin syndrome. The risk may be higher if one also takes certain other medicines that affect serotonin levels in the body.
- **Option C:** Potential side effects such as fine tremor, drowsiness, diarrhea, polyuria, thirst, weight gain, and fatigue can be disturbing to the client. Some side effects may occur that usually do not need medical attention. These side effects may go away during treatment as the body adjusts to the medicine. Also, the health care professional may be able to tell about ways to prevent or reduce some of these side effects.

83. A maternity nurse is providing instruction to a new mother regarding the psychosocial development of the newborn infant. Using Erikson's psychosocial

development theory, the nurse would instruct the mother to

- A. Allow the newborn infant to signal a need
- B. Anticipate all of the needs of the newborn infant
- C. Avoid the newborn infant during the first 10 minutes of crying
- D. Allow the infant to cry, once lessen, then attend to the infant

Correct Answer: A. Allow the newborn infant to signal a need.

If a newborn is not allowed to signal a need, the newborn will not learn how to control the environment. The primary way the caregiver can build trust with the baby is to respond when they try to communicate. Because babies can't use words to express themselves, they use nonverbal strategies to communicate what they're thinking and feeling at all times.

- **Option B:** According to Erikson, the caregiver should not try to anticipate the newborn infant's needs at all times but must allow the newborn infant to signal needs. Crying is one of the most common strategies babies use to communicate with their caregivers, and it carries different meanings.
- **Option C:** It is important for caregivers to provide comfort to an infant by holding them closely and securely. This provides both warmth and physical contact. Feeding, bathing, and comforting your child helps them learn to trust that their needs will be met.
- **Option D:** Erikson believed that a delayed or prolonged response to a newborn's signal would inhibit the development of trust and lead to mistrust of others. By responding quickly and appropriately to the infant's cries, the caregiver is building a foundation of trust.

84. The physician orders continuous intravenous nitroglycerin infusion for the client with MI. Essential nursing actions include which of the following?

- A. Obtaining an infusion pump for the medication.
- B. Monitoring BP q4h.
- C. Monitoring urine output hourly.
- D. Obtaining serum potassium levels daily.

Correct Answer: A. Obtaining an infusion pump for the medication.

IV nitro infusion requires an infusion pump for precise control of the medication. When administered as a drip in the emergency room or ICU, its effects are often very closely monitored via an arterial line for real-time blood pressure monitoring. This vigilance is necessary to maximize the effectiveness of the drip and provide rapid feedback on the patient's condition.

- **Option B:** BP monitoring would be done with a continuous system, and more frequently than every 4 hours. The drip is frequently used to treat acute coronary syndromes, hypertensive emergency, and acute congestive heart failure (CHF) exacerbations. When administered, its effect requires tight monitoring. Some patients can be more sensitive to the hypotension caused by nitrates, which can result in nausea, vomiting, diaphoresis, pallor, and collapse even at therapeutic doses.
- **Option C:** Hourly urine outputs are not always required. Nitroglycerin is both a protein-bound drug, and undergoes hepatic metabolism. Therefore it has numerous drug interactions. Before prescribing, providers should determine if the patient is taking any medications that may interact with nitroglycerin. Common interactions include alteplase, heparin, tricyclic antidepressants, and

other anticholinergic drugs. Alcohol intake should also be limited.

- **Option D:** Obtaining serum potassium levels is not associated with nitroglycerin infusion. Any testing does not currently monitor nitroglycerin levels as its half-life is approximately 2 to 3 minutes, and the drug undergoes rapid metabolism from the body. Continuous monitoring of blood pressure, heart rate, respiratory rate, and oxygen saturation is recommended.

85. Nurse Ronn is assessing a client with possible Cushing's syndrome. In a client with Cushing's syndrome, the nurse would expect to find:

- A. Hypotension.
- B. Thick, coarse skin.
- C. Deposits of adipose tissue in the trunk and dorsocervical area.
- D. Weight gain in arms and legs.

Correct Answer: C. Deposits of adipose tissue in the trunk and dorsocervical area.

Because of changes in fat distribution, adipose tissue accumulates in the trunk, face (moonface), and dorsocervical areas (buffalo hump). Physical examination of the patient will reveal increased fat deposits in the upper half of the body leading to "Buffalo torso," characteristic moon facies (earlobes are not visible when viewed from the front), thin arms and legs, acne, hirsutism, proximal muscle weakness of shoulder and hip girdle muscles, paper-thin skin, abdominal pain due to gut perforation in rare cases, and wide vertical purplish abdominal striae.

- **Option A:** Hypertension is caused by fluid retention. Patients may also have a history of hypertension, peptic ulcer disease, and diabetes. Hypertension is a very common comorbidity in patients with Cushing's disease/syndrome, resulting from the interplay of several pathophysiologic mechanisms, including stimulation of mineralocorticoid and glucocorticoid receptors as well as the associated insulin resistance, sleep apnea, and overexpression of renin-angiotensin system.
- **Option B:** Thinning of the skin and other mucous membranes: the skin becomes dry and bruises easily. Cortisol causes the breakdown of some dermal proteins along with the weakening of small blood vessels. In fact, the skin may become so weak as to develop a shiny, paper-thin quality which allows it to be torn easily.
- **Option D:** Muscle wasting causes muscle atrophy and thin extremities. The effect of circulating levels of cortisol on the muscles varies from slight to marked. Muscle wasting can be so extensive that the condition stimulates muscular dystrophy. Marked weakness of the quadriceps muscle often prevents affected people from rising out of a chair unassisted.

86. An 83-year-old male client is in extended care facility is anxious most of the time and frequently complains of a number of vague symptoms that interfere with his ability to eat. These symptoms indicate which of the following disorders?

- A. Conversion disorder
- B. Hypochondriasis
- C. Severe anxiety
- D. Sublimation

Correct Answer: B. Hypochondriasis

Complaints of vague physical symptoms that have no apparent medical causes are characteristic of clients with hypochondriasis. In many cases, the GI system is affected. Hypochondriasis, which is now known as illness anxiety disorder, and the other somatic symptom disorders (e.g., factitious disorder, conversion disorder) are among the most difficult and most complex psychiatric disorders to treat in the general medical setting. On the basis of many new developments in this field, the DMS-5 has revised diagnostic criteria to facilitate clinical care and research. While illness anxiety disorder is included in the category of “somatic symptom and related disorders” it continues to have much overlap with obsessive-compulsive disorder and related illness.

- **Option A:** Conversion disorders are characterized by one or more neurologic symptoms. Conversion disorder is a mental condition in which a person has blindness, paralysis, or other nervous system (neurologic) symptoms that cannot be explained by medical evaluation. People who have conversion disorder are not making up their symptoms in order to obtain shelter, for example (malingering). They are also not intentionally injuring themselves or lying about their symptoms just to become a patient (factitious disorder). Some health care providers falsely believe that conversion disorder is not a real condition and may tell people that the problem is all in their head. But this condition is real. It causes distress and cannot be turned on and off at will.
- **Option C:** The client’s symptoms don’t suggest severe anxiety. People with anxiety disorders frequently have intense, excessive and persistent worry and fear about everyday situations. Often, anxiety disorders involve repeated episodes of sudden feelings of intense anxiety and fear or terror that reach a peak within minutes (panic attacks).
- **Option D:** A client experiencing sublimation channels maladaptive feelings or impulses into socially acceptable behavior. Transforming one’s anxiety or emotions into pursuits that are considered by societal or cultural norms to be more useful. This defense mechanism may be present in someone who channels their aggression and energy into playing sports.

87. A patient has returned to his room after femoral arteriography. All of the following are appropriate nursing interventions except:

- A. Assess femoral, popliteal, and pedal pulses every 15 minutes for 2 hours.
- B. Check the pressure dressing for sanguineous drainage.
- C. Assess vital signs every 15 minutes for 2 hours.
- D. Order a hemoglobin and hematocrit count 1 hour after the arteriography.

Correct Answer: D. Order a hemoglobin and hematocrit count 1 hour after the arteriography

A hemoglobin and hematocrit count would be ordered by the physician if bleeding were suspected. Arterial puncture occurs at the start of angiography and interventional radiology, and is a very important factor determining the success or failure of successive procedures. Recently, this procedure has been performed by a range of approaches depending on the type of surgery, e.g, through the radial artery.

- **Option A:** The methods of hemostasis for the femoral artery include manual compression, which is the removal of the sheath and compression with the hands, and methods that apply compression devices¹). Of these, manual compression requires absolute bed rest for a few hours. On the other hand, the level of patient discomfort is increased due to lengthy bed rest and the restriction of walking.
- **Option B:** Moreover, hematoma in the punctured area of blood vessels, formation of a pseudoaneurysm, and vascular occlusions develop in approximately 1–5% of cases). A variety of hemostasis devices have been developed to treat these complications that allow for rapid recovery

of patients from bed rest. These include Angio-seal device (collagen sponge and copolymer anchor) and percutaneous placement of a device (Prostar) that utilizes two nonabsorbable sutures (Perclose, Redwood City, CA, USA).

- **Option C:** The other answers are appropriate nursing interventions for a patient who has undergone femoral arteriography. The Angio-seal device uses a method of adsorption with a collagen sponge placed within the blood vessels. The Prostar device uses a method in which the blood vessels are sutured. These hemostasis devices can reduce the discomfort and the time to hemostasis (clotting time) in the puncture area when used in patients, who cannot lie down in bed for a long time or in patients with low platelet values who have received anticoagulation treatments.

88. Kendall, the sister of a client with a substance-related disorder, tells the nurse she calls out sick for her sister Kylie occasionally when the latter has too much to drink and cannot work. This behavior can be described as:

- A. Caretaking
- B. Codependent
- C. Helpful
- D. Supportive

Correct Answer: B. Codependent

Enabling behaviors that inadvertently promote continued use of a substance by the person abusing substances is known as codependency. Codependency is a type of dysfunctional relationship that involves one person's self-esteem and emotional needs being dependent on the other person. The codependent person may also enable the other person's unhealthy behaviors.

- **Option A:** The sister's behavior is not an example of caretaking or support. She is taking responsibility for the client's behavior and allowing her to avoid the consequences of his abuse problem. People in a relationship with those who have alcohol use disorder can develop codependency, which is an unhealthy focus on the other person's needs over their own. Nonetheless, codependency can happen in relationships without alcoholism, generally in a different type of caretaker situation, such as a relationship involving a physical or mental illness. Treatment can help people with codependency improve their own self-esteem and learn to have healthier relationships.
- **Option C:** Alcohol abuse can isolate a person from the outside world. But at home, in the family, there is no isolation or separation; everyone who lives with an alcoholic is affected by their illness and the frightening and unpredictable behavior it causes.
- **Option D:** The behavior is unhelpful and unsupportive. Oftentimes, when family dynamics are corrupted by alcohol the two dominant emotions in the household are denial and shame, which are clearly interrelated. The whole family may cooperate in hiding the truth about the alcohol abuse from others, even as they refuse to accept the full truth among themselves. Extended family members may or may not go along with this ruse, but if they do try to confront the person with the alcohol use disorder they may be rebuffed—not just by the alcoholic, but by spouses, children, or others living in the home.

89. A heparin infusion at 1,500 units/hour is ordered for a 64-year-old client with stroke in evolution. The infusion contains 25,000 units of heparin in 500 ml of saline solution. How many milliliters per hour should be given?

- A. 15 ml/hour
- B. 30 ml/hour
- C. 45 ml/hour
- D. 50 ml/hour

Correct Answer: B. 30 ml/hour

An infusion prepared with 25,000 units of heparin in 500 ml of saline solution yields 50 units of heparin per milliliter of solution. The equation is set up as 50 units times X (the unknown quantity) equals 1,500 units/hour, X equals 30 ml/hour.

- **Option A:** 15 ml/hr is incorrect based on the computation used.
- **Option C:** 45 ml/hr is more than the correct milliliters to be infused based on the computation.
- **Option D:** 50 ml/hr is incorrect because it is way more than the correct milliliter to be infused.

90. Which criterion is needed for someone to give consent to a procedure?

- A. An appointed guardianship
- B. Unemancipated minor
- C. Minimum of 21 years or older
- D. An advocate for a child

Correct Answer: A. An appointed guardianship

A guardian has been appointed by a court and has full legal rights to choose management of care. A situation may arise in which a patient cannot make decisions independently but has not designated a decision-maker. In this instance, the hierarchy of decision-makers, which is determined by each state's laws, must be sought to determine the next legal surrogate decision-maker. If this is unsuccessful, a legal guardian may need to be appointed by the court.

- **Option B:** An exception to this rule is a legally emancipated child who may provide informed consent for himself. Some, but not all, examples of an emancipated minor include minors who are (1) under 18 and married, (2) serving in the military, (3) able to prove financial independence, or (4) mothers of children (married or not).
- **Option C:** Children (typically under 17) cannot provide informed consent. As such, parents must permit treatments or interventions. In this case, it is not termed "informed consent" but "informed permission." Legislation regarding minors and informed consent is state-based as well. It is important to understand the state laws.
- **Option D:** An advocate for the child is not legally appointed by the court. Several exceptions to the requirement for informed consent include (1) the patient is incapacitated, (2) life-threatening emergencies with inadequate time to obtain consent, and (3) voluntary waived consent. If the patient's ability to make decisions is questioned or unclear, an evaluation by a psychiatrist to determine competency may be requested.

91. Which intervention is an example of primary prevention?

- A. Administering digoxin (Lanoxicaps) to a patient with heart failure.

- B. Administering measles, mumps, and rubella immunization to an infant.
- C. Obtaining a Papanicolaou smear to screen for cervical cancer.
- D. Using occupational therapy to help a patient cope with arthritis.

Correct Answer: B. Administering measles, mumps, and rubella immunization to an infant.

Immunizing an infant is an example of primary prevention, which aims to prevent health problems. Primary prevention includes those preventive measures that come before the onset of illness or injury and before the disease process begins. Examples include immunization and taking regular exercise to prevent health problems developing in the future.

- **Option A:** Administering digoxin to treat heart failure and obtaining a smear for a screening test are examples for secondary prevention, which promotes early detection and treatment of disease. Those preventive measures that lead to early diagnosis and prompt treatment of a disease, illness, or injury to prevent more severe problems developing. Here health educators such as Health Extension Practitioners can help individuals acquire the skills of detecting diseases in their early stages.
- **Option C:** Obtaining a Papanicolaou smear is a secondary prevention. Secondary prevention includes those preventive measures that lead to early diagnosis and prompt treatment of a disease, illness, or injury. This should limit disability, impairment, or dependency and prevent more severe health problems developing in the future.
- **Option D:** Using occupational therapy to help a patient cope with arthritis is an example of tertiary prevention, which aims to help a patient deal with the residual consequences of a problem or to prevent the problem from recurring. Tertiary prevention includes those preventive measures aimed at rehabilitation following significant illness. At this level, health educators work to retrain, re-educate and rehabilitate the individual who has already had an impairment or disability.

92. A male client with a recent history of rectal bleeding is being prepared for a colonoscopy. How should the nurse position the client for this test initially?

- A. Lying on the right side with legs straight
- B. Lying on the left side with knees bent
- C. Prone with the torso elevated
- D. Bent over with hands touching the floor

Correct Answer: B. Lying on the left side with knees bent

For a colonoscopy, the nurse initially should position the client on the left side with knees bent. Preparation for a colonoscopy is the biggest complaint that most patients have about receiving the procedure, and is a primary reason for non-compliance to screening colonoscopies. The technician or nurse is there to assist with preserving stability and preventing the patient from rolling forward or backward. Also, they are there to help provide counter pressure to the abdomen to assist the endoscopist in navigating corners and turns.

- **Option A:** Placing the client on the right side with legs straight wouldn't allow proper visualization of the large intestine. Performing a colonoscopy requires practice and is a skill that is difficult to master. While watching an experienced clinician perform a colonoscopy may appear simple, the technique is something that requires time, patience, and a lot of practice. Navigating through a cylindrical tube that can flex, dilate, contract, and move is not an easy task.

- **Option B:** Placing the client prone with the torso elevated wouldn't allow proper visualization of the large intestine. The patient should be positioned in the left lateral decubitus position. Although, some clinicians may prefer the patient on their back or right side if circumstances require. The legs being flexed toward the chest help to relax the puborectalis and pubococcygeus muscles. This allows for easier entry and traversing past the angle at the sacral prominence.
- **Option D:** Placing the client bent over with hands touching the floor wouldn't allow proper visualization of the large intestine. On the left-sided position, the patient's legs should be flexed, and pillows should be placed around their back, head, and between their knees to help prevent injury to the bony prominence and to help maintain position.

93. A nurse is about to administer naloxone hydrochloride (Narcan) to a client with a known opioid overdose. Which of the following equipment should be readily available at the bedside?

- A. Suction machine
- B. Nasogastric tube
- C. Resuscitative equipment
- D. Dressing tray

Correct Answer: C. Resuscitative equipment

Naloxone is an opioid antagonist medication that is used to rapidly reverse an opioid overdose. While administering, resuscitation equipment, oxygen, mechanical ventilator should be readily available in case of the occurrence of an overdose which is life-threatening and requires immediate emergency attention.

- **Options A, B, & D:** These are not used during the medication therapy.

94. A woman with preeclampsia is receiving magnesium sulfate. The nurse assigned to care for the client determines that the magnesium therapy is effective if:

- A. Ankle clonus is noted.
- B. The blood pressure decreases.
- C. Seizures do not occur.
- D. Scotomas are present.

Correct Answer: C. Seizures do not occur.

For a client with preeclampsia, the goal of care is directed at preventing eclampsia (seizures). Seizures were a half or a third less likely to recur after treatment with magnesium. Maternal mortality was also lower in women allocated magnesium rather than phenytoin or diazepam, although this did not achieve statistical significance. Recent Cochrane reviews, however, indicated a significant reduction in maternal mortality with magnesium.

- **Option A:** Ankle clonus indicated hyperreflexia and may precede the onset of eclampsia. Although brisk or hyperactive reflexes are common during pregnancy, clonus is a sign of neuromuscular irritability that usually reflects severe preeclampsia.

- **Option B:** Magnesium sulfate is an anticonvulsant, not an antihypertensive agent. Although a decrease in blood pressure may be noted initially, this effect is usually transient.
- **Option D:** Scotomas are areas of complete or partial blindness. Visual disturbances, such as scotomas, often precede an eclamptic seizure.

95. The nurse has given instructions to the client with an ileostomy about foods to eat to thicken the stool. The nurse determines that the client needs further instructions if the client starts to eat which of the following foods to make the stools less watery?

- A. Pasta
- B. Boiled rice
- C. Bran
- D. Low-fat cheese

Correct Answer: C. Bran

Foods that help thicken the stool of the client with an ileostomy include pasta, boiled rice, and low-fat cheese. Bran is high in dietary fiber and thus will increase the output of watery stool by increasing propulsion through the bowel. Ileostomy output is liquid. The addition or elimination of various foods can help thicken or loosen this liquid drainage.

- **Option A:** Eat foods that thicken the stool such as rice, pasta, cheese, bananas, applesauce, smooth peanut butter, pretzels, yogurt, and marshmallows. Drink 2 or 3 glasses of fluid that will replace electrolytes like sports drinks, fruit or vegetable juice, and broth but limit these items. Too much sugar drinks can produce diarrhea.
- **Option B:** Slowly increase intake of high-fiber foods, such as whole grains, bread, and cereals. As a daily goal, women need 25 grams of fiber; men need 38 grams of fiber. For more fluid, fiber, and vitamin punch, eat at least five servings of fruits and vegetables per day. An easy way to do this is to fill half of the plate with fruit and/or vegetables at every meal
- **Option D:** Any bland, low-fat, low-fiber diet is likely to help alleviate diarrhea. By bland, low-fat, low-fiber, we're referring to foods such as white bread, peeled potatoes, peeled and cooked fruit, white pasta, and rice. Another way to approach this is to avoid spicy, fatty, fried, or raw food and any food that's difficult to chew.

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

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

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

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

97. A client is admitted with needle tracks on his arm, stuporous and with pinpoint pupil will likely be managed with:

- A. naltrexone (Revia)
- B. naloxone hydrochloride (Narcan)
- C. disulfiram (Antabuse)
- D. methadone (Dolophine)

Correct Answer: B. naloxone hydrochloride (Narcan)

Narcan is a narcotic antagonist used to manage the CNS depression due to overdose with heroin. Naloxone is indicated for the treatment of opioid toxicity, specifically to reverse respiratory depression from opioid use. It is useful in accidental or intentional overdose and acute or chronic toxicity. Common opioid overdoses treated with naloxone include heroin, fentanyl, carfentanil, hydrocodone, oxycodone, methadone, and others.

- **Option A:** This is an opiate receptor blocker used to relieve the craving for heroin. Naltrexone is an opioid antagonist used to treat alcohol use disorder and opioid dependence. Naltrexone is a mu-opioid antagonist. It is FDA-approved for alcohol abuse and opioid dependence treatment. Off-label use includes treatment of cholestatic pruritus in adults. Researchers are studying its use in patients with stimulant addiction, particularly for patients with polydrug dependence on opioids, heroin, and amphetamine.
- **Option C:** Disulfiram is used as a deterrent in the use of alcohol. Disulfiram is one of three drugs approved by the FDA for the treatment of alcohol dependence. It is a second-line option (acamprosate and naltrexone are first-line treatments) in patients with sufficient physician supervision. Disulfiram is safe and efficient in supervised short-term and long-term treatment of individuals dependent on alcohol but who are motivated to discontinue alcohol use.
- **Option D:** Methadone is used as a substitute in the withdrawal from heroin. Methadone and buprenorphine are FDA approved to treat opioid use disorder as part of federally regulated opioid treatment programs. Methadone prescriptions are for detoxification and maintenance therapy. Methadone is a useful agent for opioid withdrawal symptoms such as tachycardia, diaphoresis, nausea, vomiting, diarrhea, etc.

98. When assessing a premorbid personality characteristics of a client with a major depression, it would be unusual for the nurse to find that this client demonstrated:

- A. Rigidity
- B. Stubbornness
- C. Diverse interest
- D. Over meticulousness

Correct Answer: C. Diverse interest

Before the onset of depression, these clients usually have very narrow, limited interests. Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest. The common features of all depressive disorders are sadness, emptiness, or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function.

- **Option A:** The investigation into depressive symptoms begins with inquiries of the neurovegetative symptoms which include changes in sleeping patterns, appetite, and energy levels. Positive responses should elicit further questioning focused on evaluating for the presence of the symptoms which are diagnostic of major depression.
- **Option B:** Life events and hassles operate as triggers for the development of depression. Traumatic events such as the death or loss of a loved one, lack or reduced social support, caregiver burden, financial problems, interpersonal difficulties, and conflicts are examples of stressors that can trigger depression.
- **Option D:** Patients with depression also exhibit cognitive distortions that help to maintain their negative beliefs. CBT for depression typically includes behavioral strategies (i.e., activity scheduling), as well as cognitive restructuring to change negative automatic thoughts and addressing maladaptive schemas.

99. Which of the following variables will he likely exclude in his study?

- A. Competence of nurses
- B. Caring attitude of nurses
- C. Salary of nurses
- D. Responsiveness of staff

Correct Answer: C. Salary of nurses

The salary of staff nurses is not an indicator of patient satisfaction, hence need not be included as a variable in the study. A variable in research simply refers to a person, place, thing, or phenomenon that the researcher is trying to measure in some way. The best way to understand the difference between a dependent and independent variable is that the meaning of each is implied by what the words tell us about the variable the researcher is using.

- **Option A:** The competence of nurses can affect the patient's satisfaction rate, therefore it is an independent variable. The variable that is stable and unaffected by the other variables the researcher is trying to measure. It refers to the condition of an experiment that is systematically manipulated by the investigator. It is the presumed cause.
- **Option B:** The caring attitude of the nurses can affect the patient's satisfaction rate, therefore it is an independent variable. An important distinction has to do with the term 'variable' is the distinction between an independent and dependent variable. This distinction is particularly relevant when the researcher is investigating cause-effect relationships.
- **Option D:** The responsiveness of the staff can affect the patient's satisfaction rate, therefore it is an independent variable. Anything that can vary can be considered a variable. For instance, age can be considered a variable because age can take different values for different people or for the same person at different times.

100. The client has been hospitalized and is participating in a substance abuse therapy group sessions. On discharge, the client has consented to participate in AA community groups. The nurse is monitoring the client's response to the substance abuse sessions. Which statement by the client best indicates that the client has developed effective coping response styles and has processed information effectively for self use?

A. "I know I'm ready to be discharged. I feel I can say 'no' and leave a group of friends if they are drinking... 'No Problem.'"

B. "This group has really helped a lot. I know it will be different when I go home. But I'm sure that my family and friends will all help me like the people in this group have... They'll all help me... I know they will... They won't let me go back to my old ways."

C. "I'm looking forward to leaving here. I know that I will miss all of you. So, I'm happy and I'm sad, I'm excited and I'm scared. I know that I have to work hard to be strong and that everyone isn't going to be as helpful as you people."

D. "I'll keep all my appointments; go to all my AA groups; I'll do everything I'm supposed to... Nothing will go wrong that way."

Correct Answer: C. "I'm looking forward to leaving here. I know that I will miss all of you. So, I'm happy and I'm sad, I'm excited and I'm scared. I know that I have to work hard to be strong and that everyone isn't going to be as helpful as you people."

The client is expressing real concern and ambivalence about discharge from the hospital. The client also demonstrates reality in that statement. In support groups, there's a collective strength — a collaboration of like-minded individuals all pursuing recovery and willing to help others who desire a sober life as well. Here you'll share experiences as well as provide encouragement and support to fellow group members.

- **Option A:** In the defense mechanism of denial the person denies reality. The basis for 12-step programs is a guideline which, if followed step by step, leads one through a series of practices. These practices are intended to gather knowledge of self, become open to accept help, consciously work to change thoughts and behaviors, and maintain through ongoing efforts. AA calls this "recovery." Their belief is that one is never really "cured" of alcoholism. Rather, they believe that the alcohol-dependent instead needs to perpetually maintain an effort to remain sober, and progress via awareness of their susceptibility to alcohol abuse.
- **Option B:** The client is relying heavily on others, and the client's focus of control is external. AA is a faith-based program and they stress giving over oneself to a "higher power" or God. This does not, however, preclude one from benefiting from the program if they are not particularly inclined toward religion. There are ways to still practice the steps so one can "take what they need" from the program and "leave the rest," as sometimes advised by those familiar with the program. One piece of advice frequently offered is that your "higher power" can be anything, even be sobriety itself.
- **Option D:** The client is concrete and procedure-oriented; again the client identifies that "Nothing will go wrong that way" if the client follows all the directions. Meetings provide a secure, readily available, and consistent environment to continue to work on your recovery. In particular, these groups provide a support system that can offer stories of hope and reminders of the importance of working a recovery program. After all, in the context of recovery from addiction, support groups have a specific purpose: to allow recovering addicts to work on their recovery and help others do the same. It's a place where hope and a sense of purpose can begin to grow and then flourish.