

Kevin's Review - 100 NCLEX Practice Questions

1. A 78-year-old male patient with a recent hip replacement surgery is learning to use a standard aluminum walker under the guidance of the nurse. The patient has mild arthritis in both hands and experiences occasional shortness of breath. Which of the following behaviors, if demonstrated by the patient, indicates that the nurse's teaching was effective?

- A. The client slowly pushes the walker forward 12 inches, then takes small steps forward while leaning on the walker.
- B. The client lifts the walker, moves it forward 10 inches, and then takes several small steps forward.
- C. The client supports his weight on the walker while advancing it forward, then takes small steps while balancing on the walker.
- D. The client slides the walker 18 inches forward, then takes small steps while holding onto the walker for balance.
- E. The patient places the walker ahead, leans on it with one hand while holding his hip with the other, and then steps forward.
- F. The patient holds the sides of the walker, takes a step forward, and then moves the walker to align with his new position.

Correct Answer: B. The client lifts the walker, moves it forward 10 inches, and then takes several small steps forward.

Lifting the walker slightly, moving it forward a short distance (10 inches), and then taking steps is the recommended method. This technique ensures stability and minimizes the risk of falls. A walker needs to be picked up, placed down on all legs.

- **Option A:** Teach the client to lift, not push, the walker forward, and not to lean on it to avoid falls.
- **Option C:** The client should not put his weight on the walker as it may lead to incidents of falls.
- **Option D:** A walker should be lifted, not slide.
- **Option E:** Leaning on the walker with one hand while holding the hip with the other does not provide adequate support and may lead to imbalance.
- **Option F:** The patient should lift and move the walker slightly forward, not just hold its sides and step forward. This method might not provide sufficient stability.

2. A patient is undergoing the induction stage of treatment for leukemia. The nurse teaches family members about infectious precautions. Which of the following statements by family members indicates that the family needs more education?

- A. We will bring in books and magazines for entertainment.
- B. We will bring in personal care items for comfort.
- C. We will bring in fresh flowers to brighten the room.
- D. We will bring in family pictures and get well cards.

Correct Answer: C. We will bring in fresh flowers to brighten the room.

During induction chemotherapy, the leukemia patient is severely immunocompromised and at risk of serious infection. Fresh flowers, fruit, and plants can carry microbes and should be avoided. Teach proper hand washing using antibacterial soap before and after each care activity. Hand washing and hand hygiene lessen the risk of cross-contamination. Note: Methicillin-resistant *Staphylococcus aureus* (MRSA) is most commonly transmitted bacteria via direct contact with health care workers who are unable to wash hands between client contacts.

- **Option A:** Books and magazines can be brought to the patient, but they should be disinfected. Encourage the client to cover their mouth and nose with a tissue when coughing or sneezing. Place in a private room if indicated. Wear a mask when providing direct as appropriate. Appropriate behaviors, personal protective equipment, and isolation prevent the spread of infection via airborne droplets.
- **Option B:** Personal items can be cleaned with antimicrobials before being brought into the room to minimize the risk of contamination. Body substance isolation should be used for all infectious clients. Wound and linen isolation and hand washing may be all that is required for draining wounds. Clients with diseases transmitted through air may also need airborne and droplet precautions.
- **Option D:** The pictures should be disinfected before given to the client. Note temperature trends and observe for shaking chills and profuse diaphoresis. Fever [101°F-105°F (38.5°C-40°C)] is the result of endotoxin effect on the hypothalamus and pyrogen-released endorphins. Hypothermia lower than 96°F (36°C) is a grave sign reflecting advancing shock state, decreased tissue perfusion, and failure of the body's ability to mount a febrile response. Chills often precede temperature spikes in the presence of generalized infection.

3. Nurse Hazel invites the new client's parents to attend the psycho educational program for families of the chronically mentally ill. The program would be most likely to help the family with which of the following issues?

- A. Developing a support network with other families.
- B. Feeling more guilty about the client's illness.
- C. Recognizing the client's weakness.
- D. Managing their financial concerns and problems.

Correct Answer: A. Developing a support network with other families

Psychoeducational groups of families develop a support network. They provide education about the biochemical etiology of psychiatric disease to reduce, not increase family guilt. Psychoeducation is the provision of systematic, relevant, broad, and up-to-date information about an illness or condition, including its diagnosis and treatment. Psychoeducational programs provide both disease-specific information, e.g., early recognition and management of relapse symptoms or any potential genetic implications of the illness and general information, e.g., promotion of healthy lifestyle, problem-solving and communication skills training, identification of stressors in households, and education of family members and primary care takers in their amelioration.

- **Option B:** Psychoeducation includes information on how to explain aspects of living with an illness to family members so that they can understand the effect of the illness and assist the patient and treatment providers in the treatment program.
- **Option C:** There is evidence that psychoeducation improves the outcomes of mental illness and many other medical illnesses. Family interventions, including psychoeducation for schizophrenia, have proved to be one of the most consistently effective treatment modalities available, with

relapse rate reduction at 50–60% over treatment as usual. Besides relapse severity reduction, psychoeducation leads to less frequent relapses, better treatment adherence, lower self-stigma, better quality of life, improvement of social competencies, active engagement in rehabilitation, and lower cost of care, either alone or as a part of a complex treatment regimen.

- **Option D:** There is similar evidence that psychoeducation and family interventions may reduce the recurrence of bipolar disorders and depression. Psychoeducation and cognitive behavioral therapy are associated with increased time to mood episode relapse or recurrence. Preliminary evidence shows that family psychoeducation for patients with depressive disorders improves patient functioning and the well-being of family caregivers. Similarly, psychoeducation seems to reduce the burden of caregivers for dementia patients.

4. During the early postoperative period, the client who had a cataract extraction complains of nausea and severe eye pain over the operative site. The initial nursing action is to:

- A. Call the physician.
- B. Administer the ordered main medication and antiemetic.
- C. Reassure the client that this is normal.
- D. Turn the client on his or her operative side.

Correct Answer: A. Call the physician.

Severe pain or pain accompanied by nausea is an indicator of increased intraocular pressure and should be reported to the physician immediately. Some of the more common complications include transient elevated intraocular pressure, corneal edema, toxic anterior segment syndrome, and endophthalmitis. Even in glaucomatous eyes, after one year, all patients will have IOP control, with some even having a decreased need for medication. The other options are inappropriate.

- **Option B:** Typically, patients are prescribed topical antibiotics, corticosteroids, or non-steroidal anti-inflammatory drops for 1 to 4 weeks postoperatively. Patients are counseled to follow up the day after surgery, at 1 week, 1 month, and then 3 months postoperatively.
- **Option C:** Even though cataract surgery greatly improves vision and quality of life, patients may continue to have subjective visual complaints. Commonly, they will include seeing shadows, halos, glare, starburst patterns around lights, and hazy vision.
- **Option D:** Turning the client on his operative side will increase the intraocular pressure. Instruct the patient to watch out for the development of complications, such as sharp pain in the eye uncontrolled by analgesics, or clouding in the anterior chamber. This may indicate infection and should be reported immediately.

5. The nurse is preparing to discharge a patient with chronic low back pain. Which statement by the patient indicates that additional teaching is necessary?

- A. "I will avoid exercise because the pain gets worse."
- B. "I will use heat or ice to help control the pain."
- C. "I will not wear high-heeled shoes at home or work."
- D. "I will purchase a firm mattress to replace my old one."

Correct Answer: A. “I will avoid exercise because the pain gets worse.”

Exercises are used to strengthen the back, relieve pressure on compressed nerves and protect the back from re-injury. Doing exercises to strengthen the lower back can help alleviate and prevent lower back pain. It can also strengthen the core, leg, and arm muscles. According to researchers, exercise also increases blood flow to the lower back area, which may reduce stiffness and speed up the healing process.

- **Option B:** Ice and heat application are appropriate interventions for back pain. Applying ice or a reusable gel pack constricts blood vessels and reduces swelling around the injury. This is particularly useful for conditions, like a sprained ankle, that cause significant swelling. Heat has the opposite effect, increasing blood flow to the area. This relaxes muscle fibers, which can help when the client experiences spasms or stiffness.
- **Option C:** People with chronic back pain should avoid wearing high-heeled shoes at all times. The normal s-curve of the spine acts as a cushion or spring, reducing stress on the vertebrae. When wearing high heels, the shape of the spine is altered and the client doesn't get that same shock absorption as she walks, which, over time, can lead to uneven wear on the cartilage discs, joints and ligaments of the back.
- **Option D:** A firm mattress prevents lower back pain. Sleeping on a mattress that is too firm can cause aches and pains on pressure points. A medium-firm mattress may be more comfortable because it allows the shoulder and hips to sink in slightly. Patients who want a firmer mattress for back support can get one with thicker padding for greater comfort.

6. Which of the following values is considered normal for ICP?

- A. 0 to 15 mm Hg
- B. 25 mm Hg
- C. 35 to 45 mm Hg
- D. 120/80 mm Hg

Correct Answer: A. 0 to 15 mm Hg

Normal ICP is 0-15 mm Hg. Intracranial hypertension (IH) is a clinical condition that is associated with an elevation of the pressures within the cranium. The pressure in the cranial vault is measured in millimeters of mercury (mm Hg) and is normally less than 20 mm Hg.

- **Option B:** An increase in the volume of one component will result in a decrease of volume in one or two of the other components. The clinical implication of the change in volume of the component is a decrease in cerebral blood flow or herniation of the brain.
- **Option C:** Cerebral perfusion pressure (CPP) is the pressure gradient between mean arterial pressure (MAP) and intracranial pressure (CPP = MAP – ICP). CPP = MAP – CVP if central venous pressure is higher than intracranial pressure. CPP target for adults following severe traumatic brain injury is recommended at greater than 60 to 70 mm Hg, and a minimum CPP greater than 40 mm Hg is recommended for infants, with very limited data on normal CPP targets for children in between.
- **Option D:** This is a normal blood pressure level. Cushing triad is a clinical syndrome consisting of hypertension, bradycardia and irregular respiration and is a sign of impending brain herniation. This occurs when the ICP is too high the elevation of blood pressure is a reflex mechanism to maintain CPP. High blood pressure causes reflex bradycardia and brain stem compromise affecting respiration.

7. When developing a plan of care for a female client with acute stress disorder who lost her sister in a car accident. Which of the following would the nurse expect to initiate?

- A. Facilitating progressive review of the accident and its consequences.
- B. Postponing discussion of the accident until the client brings it up.
- C. Telling the client to avoid details of the accident.
- D. Helping the client to evaluate her sister's behavior.

Correct Answer: A. Facilitating progressive review of the accident and its consequences

The nurse would facilitate progressive review of the accident and its consequence to help the client integrate feelings & memories and to begin the grieving process. Help patients reframe any destructive cognitions (eg, beliefs that they acted terribly and are terrible people or are weak for being so distraught, that life is hopeless or worthless, or that the world is totally unsafe).

- **Option B:** Support self-esteem; help patients understand that their reaction to the trauma is a normal reaction to an abnormal situation, not a sign of weakness or psychopathology. Reassure and help survivors concerning immediate needs, such as rest, food, shelter, social support, or a sense of belonging to a community (some feel cut off and detached).
- **Option C:** Promote coping mechanisms. Avoid prompting discussion of issues that cannot be resolved; avoid abreaction in groups and the resulting contagion effect; respect defenses, and do not force reality on people who cannot handle it yet; keep in mind that debriefing may be harmful. Discuss the experience with patients who want to talk about it, and avoid pressuring those who do not wish to discuss it.
- **Option D:** Check to see if children feel that they somehow caused the death or disaster or if they have other misunderstandings, and take pains to reassure them or correct any misunderstanding; do not assume children are fine just because they are not saying anything. Let them know it is all right to talk about unpleasant feelings (including sadness and anger) and listen to them; sharing personal feelings of sadness with them is all right as well.

8. Teaching for a client with chronic obstructive pulmonary disease (COPD) should include which of the following topics?

- A. How to have his wife learn to listen to his lungs with a stethoscope from Wal-Mart.
- B. How to increase his oxygen therapy.
- C. How to treat respiratory infections without going to the physician.
- D. How to recognize the signs of an impending respiratory infection.

Correct Answer: D. How to recognize the signs of an impending respiratory infection.

Respiratory infection in clients with a respiratory disorder can be fatal. It's important that the client understands how to recognize the signs and symptoms of an impending respiratory infection. Acute exacerbation of COPD is an acute worsening of respiratory symptoms. Assessing severity is often based on the model developed by Anthonisen and colleagues which classifies severity by the presence of worsening dyspnea, sputum volume, and purulence. Mild exacerbations are defined by the presence of 1 of these symptoms in addition to one of the following: increased wheezing, increased cough, fever without another cause, upper respiratory infection within 5 days, or an increase in heart rate or respiratory rate from the patient's baseline.

- **Option A:** It isn't appropriate for the wife to listen to his lung sounds, besides, you can't purchase stethoscopes from Wal-Mart. COPD will typically present in adulthood and often during the winter months. Patients usually present with complaints of chronic and progressive dyspnea, cough, and sputum production. Patients may also have wheezing and chest tightness.
- **Option B:** Hospitalized patients often require oxygen and bronchodilator therapy in the form of a SABA with or without a SAMA. Oxygen therapy can range from a nasal cannula to mechanical ventilation depending on the severity of the exacerbation. Pulmonary rehabilitation plays a large role in improving outcomes. Rehabilitation has been shown to improve the quality of life, dyspnea, and exercise capacity in patients with COPD.
- **Option C:** If the client has signs and symptoms of an infection, he should contact his physician at once. Moderate and severe exacerbations are defined by the presence of 2 or all 3 of the symptoms respectively. Patients may have acute respiratory failure and physical findings of hypoxemia and hypercapnia. Arterial blood gas analysis, chest imaging, and pulse oximetry are indicated.

9. When caring for an 11-month-old infant with dehydration and metabolic acidosis, the nurse expects to see which of the following?

- A. Tachypnea
- B. Shallow respirations
- C. A reduced white blood cell count
- D. A decreased platelet count

Correct Answer: A. Tachypnea

The body compensates for metabolic acidosis via the respiratory system, which tries to eliminate the buffered acids by increasing alveolar ventilation through deep, rapid respirations. As the body attempts to compensate for worsening acidosis, the respiratory rate increases to reduce the pCO₂ and maintain a compensated physiological pH.

- **Option B:** Initially, the breathing is rapid, but as it worsens, it gradually becomes deep and labored. Extra ketones in the body cause acid to build up in the blood. Because of this, the respiratory system is triggered to start breathing faster. Faster breathing helps expel more carbon dioxide, which is an acidic compound in the blood.
- **Option C:** An elevation of the white blood cell (WBC) count is a nonspecific finding, but it should prompt consideration of septicemia, which causes lactic acidosis. Severe anemia with compromised oxygen delivery may cause lactic acidosis.
- **Option D:** Altered platelet counts are not specific signs of metabolic imbalance. Acidosis compromises the clotting process and accelerates fibrinogen consumption with no effect on fibrinogen production, resulting in a deficit in fibrinogen availability.

10. Which route of administration is preferred if immediate analgesia and rapid titration are necessary?

- A. Intraspinal
- B. Patient-controlled analgesia (PCA)
- C. Intravenous (IV)

D. Sublingual

Correct Answer: C. Intravenous (IV)

The IV route is preferred as the fastest and most amenable to titration. Medications may be given as repeated intermittent bolus doses or by continuous infusion. Intravenous provides almost immediate analgesia; subcutaneous may require up to 15 minutes for effect. Bolus IV dosing provides a shorter duration of action than other routes.

- **Option A:** Intraspinal administration requires special catheter placement and there are more potential complications with this route. Intraspinal and intraventricular administration are options if maximal doses of opioids and adjuvants administered through other routes are ineffective or produce intolerable side effects {e.g., nausea/vomiting, excessive sedation, confusion}. Opioids can be administered via indwelling percutaneous or tunneled catheters into the epidural or intrathecal space.
- **Option B:** A PCA bolus can be delivered; however, the pump will limit the dosage that can be delivered unless the parameters are changed. Patient-controlled analgesia (PCA) devices can be used to combine continuous infusion with intermittent bolus doses, allowing more flexible pain control. It is recommended that the hourly SQ volume limit not exceed 5 cc. Medications can be concentrated to maintain SQ volume limits; maximal concentrations: fentanyl 50 ug/ml, morphine 50 mgs/ml, hydromorphone 50 mgs/ml.
- **Option D:** Sublingual is reasonably fast, but not a good route for titration, medication variety in this form is limited. An alkaline pH microenvironment that favors the unionized fraction of opioids increased sublingual drug absorption. Although absorption was found to be independent of drug concentration, it was contact time dependent for methadone and fentanyl but not for buprenorphine. These results indicate that although the sublingual absorption and apparent sublingual bioavailability of morphine are poor, the sublingual absorption of methadone, fentanyl, and buprenorphine under controlled conditions is relatively high.

11. The home health nurse is visiting a client with autoimmune thrombocytopenic purpura (ATP). The client's platelet count currently is 80, it will be most important to teach the client and family about:

- A. Bleeding precautions
- B. Prevention of falls
- C. Oxygen therapy
- D. Conservation of energy

Correct Answer: A. Bleeding precautions

The normal platelet count is 120,000–400, Bleeding occurs in clients with low platelets. The priority is to prevent and minimize bleeding. Review laboratory results for coagulation status as appropriate: platelet count, prothrombin time/international normalized ratio (PT/INR), activated partial thromboplastin time (aPTT), fibrinogen, bleeding time, fibrin degradation products, vitamin K, activated coagulation time (ACT); and educate the at-risk patient and caregivers about precautionary measures to prevent tissue trauma or disruption of the normal clotting mechanisms.

- **Option B:** Thoroughly conform patient to surroundings; put call light within reach and teach how to call for assistance; respond to call light immediately; avoid use of restraints; obtain a physician's order if restraints are needed; and eliminate or drop all possible hazards in the room such as razors, medications, and matches.

- **Option C:** Option C is important, but platelets do not carry oxygen. Wash hands and teach patient and SO to wash hands before contact with patients and between procedures with the patient; encourage fluid intake of 2,000 to 3,000 mL of water per day, unless contraindicated.
- **Option D:** Option D is of lesser priority and is incorrect in this instance. Recommend the use of soft-bristled toothbrushes and stool softeners to protect mucous membranes; and if infection occurs, teach the patient to take antibiotics as prescribed; instruct the patient to take the full course of antibiotics even if symptoms improve or disappear.

12. 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.

13. Basilar crackles are present in a client's lungs on auscultation. The nurse knows that these are discrete, non continuous sounds that are:

- A. Caused by the sudden opening of alveoli.
- B. Usually more prominent during expiration.
- C. Produced by airflow across passages narrowed by secretions.
- D. Found primarily in the pleura.

Correct Answer: A. Caused by the sudden opening of alveoli

Basilar crackles are usually heard during inspiration and are caused by sudden opening of the alveoli. Basilar crackles are a bubbling or crackling sound originating from the base of the lungs. They may occur when the lungs inflate or deflate. They're usually brief, and may be described as sounding wet or dry. Excess fluid in the airways causes these sounds.

- **Option B:** Bronchial sounds (also called tubular sounds) normally arise from the tracheobronchial tree and vesicular sounds normally arise from the finer lung parenchyma. Loud, harsh, and high pitched bronchial sounds are typically heard over the trachea or at the right apex. They are predominantly heard during expiration.
- **Option C:** Wheezes are musical sounds caused by air movement through constricted small airways, such as bronchioles. Wheezes and rhonchi, which have the same pathology and are separated only by pitch, are produced by the fluttering of narrowed airways and the air that flows through them.
- **Option D:** Fluid or air in the pleural space deflects sound waves away from the chest wall back into the lung and therefore breath sounds are reduced in intensity.

14. The doctor has ordered Percocet (oxycodone) for a client following abdominal surgery. The primary objective of nursing care for the client receiving an opiate analgesic is to:

- A. Prevent addiction
- B. Reduce pain
- C. Facilitate mobility
- D. Prevent nausea

Correct Answer: B. Reduce pain

- Option B: The nurse should be concerned with alleviating the client's pain. Inadequate control of postoperative pain may result in slow recovery.
- Option A: Chronic use of pain medications such as opiates can cause addiction.
- Option C: Opiates can help facilitate mobility but it is a secondary effect after relief from postoperative pain.
- Option D: Nausea is a common side effect of opioid analgesics.

15. Which information noted by the nurse reviewing the laboratory results of a patient who is receiving chemotherapy is most important to report to the health care provider?

- A. WBC count of 1700/ μ l
- B. Platelets of 65,000/ μ l
- C. Hemoglobin of 10 g/L
- D. Serum creatinine level of 1.2 mg/dl

Correct Answer: A. WBC count of 1700/ μ l

- **Option A:** Neutropenia places the patient at risk for severe infection and is an indication that the chemotherapy dose may need to be lower or that white blood cell (WBC) growth factors such as filgrastim (Neupogen) are needed.
- **Options B, C, and D:** The other laboratory data do not indicate any immediate life-threatening adverse effects of the chemotherapy.

16. Nurse Monica is handling a female client who had undergone a mastectomy. Which is the best position in which she should place the client?

- A. Head of bed elevated at least 30° with the affected arm elevated on a pillow.
- B. Forward side-lying position.
- C. Supine position with the affected arm remains flat.
- D. Head of bed elevated at least 30° with the unaffected arm elevated on a pillow.

Correct Answer: A. Head of bed elevated at least 30°.

Position a post-mastectomy client with the head of the bed elevated at least 30 degrees, with the affected arm elevated on a pillow to promote lymphatic fluid return after the removal of axillary lymph nodes. The patient is draped with the arm free to allow for movements during the procedure. It is important not to hyperextend the arm when positioning the patient; hyperextension may cause significant postoperative neurapraxia.

- **Option B:** Patient positioning is in a supine position in the operating room, and the breast, chest wall, axilla, and upper arm are exposed, after induction of anesthesia. Many surgeons may include the contralateral breast in the prepped operative field. There has been a growing trend toward breast conservation, and numerous studies have looked at the efficacy of breast-conserving surgery when compared to standard mastectomy techniques.
- **Option C:** The patient is kept in a supine position with a thin sandbag under the ipsilateral scapula to facilitate axillary dissection. The ipsilateral arm is draped separately and kept free for adduction during axillary dissection.
- **Option D:** The patient is placed supine with the ipsilateral arm stretched out level with the shoulder. The head end of the operating table is raised to 30°. The side being operated on is raised by 30°. Lymphedema is less commonly present since the advent of modified mastectomy techniques. Axillary lymph node dissection is the most significant risk factor for the development of lymphedema, with a reported incidence of greater than 20%.

17. A client with depression who has been taking amitriptyline for three months returns to the clinic for a follow-up. The nurse observes the client in which of the following symptoms?

- A. Lack of energy
- B. Suicidal thoughts
- C. Loss of interest in personal appearance
- D. Neglect of responsibilities

Correct Answer: B. Suicidal thoughts

Clients may have thoughts about suicide when taking an antidepressant such as amitriptyline especially during the beginning of the treatment and any time during dosage adjustment.

- **Options A, C, and D:** These are signs and symptoms of depression but are most likely improved as the treatment goes on.

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

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

Correct Answer: C. Confabulation

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

- **Option A:** A nearly continuous flow of accelerated speech with abrupt changes from topic to topic that are usually based on understandable associations, distracting stimuli, or plays on words. When severe, speech may be disorganized and incoherent. It is part of the DSM -5 criteria for Manic episodes.
- **Option B:** In cases of severely disordered thinking, thoughts lose almost all connections with one another and become disconnected and disjointed. This illogical thinking is called derailment or "loose" associations. In simple terms, the thinking process is frequently derailed, characterized by very weak or loose associations.
- **Option D:** In the analytic psychology of Carl Jung, a type of thought or feeling that depends on immediate physical sensation and displays little or no capacity for abstraction. In some traditional societies, such thinking may manifest itself in fetishism and belief in magic. In the modern world, it may display itself as an inability to think beyond the obvious material facts of a situation.

19. At what stage of labor is the mother advised to bear down?

- A. When the mother feels the pressure at the rectal area.
- B. During a uterine contraction.
- C. In between uterine contraction to prevent uterine rupture.
- D. Anytime the mother feels like bearing down.

Correct Answer: B. During a uterine contraction

The primary power of labor and delivery is the uterine contraction. This should be augmented by the mother's bearing down during a contraction.

- **Option A:** During the second stage of labor, the fetal presentation comes down and compression occurs in both the bladder and rectum, generating a reflex that causes a strong urge to bear down, or 'push'. Therefore, the combination of involuntary intrauterine contractions and voluntary expulsive effort, through the abdominal and respiratory muscles, will help fetus delivery.
- **Option C:** Maternal pushing during the second stage of labor is an important and indispensable contributor to the involuntary expulsive force developed by uterine contraction.

- **Option D:** Waiting for the urge to push with an epidural does shorten the duration of pushing and increases spontaneous vaginal delivery, but lengthens the second stage and doubles the risk of low umbilical cord pH (based on data from one study).

20. The nurse is conducting a physical assessment on a client with anemia. Which of the following clinical manifestations would be most indicative of the anemia?

- A. BP 146/88
- B. Respirations 28 shallow
- C. Weight gain of 10 pounds in 6 months
- D. Pink complexion

Correct Answer: B. Respirations 28 shallow

When there are fewer red blood cells, there is less hemoglobin and less oxygen. Therefore, the client is often short of breath.

- **Options A, C, and D:** The client with anemia is often pale in color, has weight loss, and may be hypotensive.

21. When teaching parents about the child's readiness for toilet training, which of the following signs should the nurse instruct them to watch for in the toddler?

- A. Demonstrates dryness for 4 hours.
- B. Demonstrates ability to sit and walk.
- C. Has a new sibling for stimulation.
- D. Verbalizes desire to go to the bathroom.

Correct Answer: D. Verbalizes desire to go to the bathroom

The child must be able to state the need to go to the bathroom to initiate toilet training. Toilet training is teaching the child to recognize their body signals for urinating and having a bowel movement. It also means teaching the child to use a potty chair or toilet correctly and at the appropriate times.

- **Option A:** Usually, a child needs to be dry for only 2 hours, not 4 hours. Children develop at different rates. A child younger than 12 months has no control over bladder or bowel movements. There is very little control between 12 to 18 months. Most children don't have bowel and bladder control until 24 to 30 months. The average age of toilet training is 27 months.
- **Option B:** The child also must be able to sit, walk, and squat. Toilet training should start when your child shows signs that he or she is ready. There is no right age to begin. If you try to toilet train before your child is ready, it can be a battle for both you and your child. The ability to control bowel and bladder muscles comes with proper growth and development.
- **Option C:** A new sibling would most likely hinder toilet training. If there are older siblings, ask them to let the younger child see you praising them for using the toilet.

22. Which of the following strategies is not effective for the prevention of Lyme disease?

- A. Insect repellent on the skin and clothes when in a Lyme endemic area.
- B. Long sleeved shirts and long pants.
- C. Prophylactic antibiotic therapy prior to anticipated exposure to ticks.
- D. Careful examination of skin and hair for ticks following anticipated exposure.

Correct Answer: C. Prophylactic antibiotic therapy prior to anticipated exposure to ticks.

Prophylactic use of antibiotics is not indicated to prevent Lyme disease. Antibiotics are used only when symptoms develop following a tick bite. Specific treatment is dependent upon the age of the patient and stage of the disease. For patients older than 8 years of age with early, localized disease, doxycycline is recommended for 10 days. Patients under the age of 8 should receive amoxicillin or cefuroxime for 14 days to avoid the potential for tooth staining caused by tetracycline use in young children.

- **Option A:** Insect repellent should be used on skin and clothing when exposure is anticipated. While there are many repellents on the market, it is best to avoid them as the risk of harm is greater than any benefit. If one is going to use a repellent, DEET is the one product that is safe, however, it is not 100% effective.
- **Option B:** Clothing should be designed to cover as much exposed area as possible to provide an effective barrier. The outdoors person should be told to wear appropriate garments and be familiar with the skin features of the tick bite. The nurse should educate the patient on how to remove the tick from the skin and when to seek medical assistance.
- **Option D:** Close examination of skin and hair can reveal the presence of a tick before a bite occurs. Nurses should educate parents on how to inspect their children for ticks at the end of an outdoor event, in an endemic area. Pets can also develop Lyme disease and carry the tick. Hence, pet owners should examine their pets on a regular basis and remove the tick. There is no risk of acquiring Lyme disease by removing the tick.

23. Nurse Claire is caring for a client diagnosed with bulimia. The most appropriate initial goal for a client diagnosed with bulimia is?

- A. Encourage to avoid food.
- B. Identify anxiety-causing situations.
- C. Eat only three meals a day.
- D. Avoid shopping for plenty of groceries.

Correct Answer: B. Identify anxiety-causing situations

Bulimia disorder generally is a maladaptive coping response to stress and underlying issues. The client should identify anxiety-causing situations that stimulate the bulimic behavior and then learn new ways of coping with the anxiety. Assist the patient to learn strategies other than eating for dealing with feelings. Have the patient keep a diary of feelings, particularly when thinking about food. Feelings are the underlying issue, and the patient often uses food instead of dealing with feelings appropriately. The patient needs to learn to recognize feelings and how to express them clearly.

- **Option A:** Make a selective menu available, and allow the patient to control choices as much as possible. Patient who gains confidence in herself and feels in control of the environment is more

likely to eat preferred foods. Be alert to choices of low-calorie foods and beverages; hoarding food; disposing of food in various places, such as pockets or wastebaskets. The patient will try to avoid taking in what is viewed as excessive calories and may go to great lengths to avoid eating.

- **Option C:** Provide diet and snacks with substitutions of preferred foods when available. Having a variety of foods available enables the patient to have a choice of potentially enjoyable foods. Provide smaller meals and supplemental snacks, as appropriate. Gastric dilation may occur if refeeding is too rapid following a period of starvation dieting. Note: the patient may feel bloated for 3–6 weeks while the body adjusts to food intake.
- **Option D:** Involve the patient in setting up or carrying out a program of behavior modification. Provide a reward for weight gain as individually determined; ignore the loss. Provides structured eating situations while allowing the patient some control in choices. Behavior modification may be effective in mild cases or for short-term weight gain.

24. A client with vaginal cancer is being treated with a radioactive vaginal implant. The client's husband asks the nurse if he can spend the night with his wife. The nurse should explain that:

- A. Overnight stays by family members is against hospital policy.
- B. There is no need for him to stay because staffing is adequate.
- C. His wife will rest much better knowing that he is at home.
- D. Visitation is limited to 30 minutes when the implant is in place.

Correct Answer: D. Visitation is limited to 30 minutes when the implant is in place.

Clients with radium implants should have close contact limited to 30 minutes per visit. The general rule is limiting time spent exposed to radium, putting distance between people and the radium source, and using lead to shield against the radium. Teaching the family member these principles is extremely important. Internal radiation therapy uses a pill, liquid, implant or temporary source to put radiation inside the body to kill the cancer cells, and may require certain safety precautions for staff and family while the patient is in the hospital or at home, according to the National Cancer Institute

- **Option A:** Do not spend any more time in the patient's room than is necessary to care for the patient. In particular, time at the patient's bedside should be kept to a minimum. Specific "stay times" will be provided on the patient's door.
- **Option B:** Visitors are allowed provided that: visitors shall be 18 years or older; the patient shall not have pregnant visitors, and visitors should remain at least 6 feet from the patients and should not stay more than 2 hours per day (unless other information is provided).
Option C: The most common safety precautions related to preventing unnecessary radiation exposure are limiting time near the patient, maintaining a safe distance of three to six feet from the source of the radiation, and using lead shielding to protect family and staff.

25. Referencing the image below, what is the name of the structure marked #13.

- A. Minor calyx
- B. Major calyx
- C. Cortical blood vessels
- D. Interlobal blood vessels

- E. Arcuate blood vessels
- F. Renal vein
- G. Renal nerve
- H. Renal cortex
- I. Renal calyx
- J. Renal pyramid

Correct answer: #13 is the renal cortex.

The renal cortex is the outer layer of the kidney, situated just beneath the renal capsule and extending down between the renal pyramids of the medulla. It contains the renal corpuscles and the convoluted tubules of the nephrons, playing a central role in the filtration and initial processing of blood to form urine.

26. 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.

27. A nurse is caring for a client in labor and is monitoring the fetal heart rate patterns. The nurse notes the presence of episodic accelerations on the electronic fetal monitor tracing. Which of the following actions is most appropriate?

- A. Document the findings and tell the mother that the monitor indicates fetal well-being.
- B. Take the mother's vital signs and tell the mother that bed rest is required to conserve oxygen.
- C. Notify the physician or nurse-midwife of the findings.
- D. Reposition the mother and check the monitor for changes in the fetal tracing.

Correct Answer: A. Document the findings and tell the mother that the monitor indicates fetal well-being.

Accelerations are transient increases in the fetal heart rate that often accompany contractions or are caused by fetal movement. Episodic accelerations are thought to be a sign of fetal-well being and adequate oxygen reserve.

- **Option B:** Inform the mother that they are usually associated with fetal movement, vaginal examinations, uterine contractions, umbilical vein compression, fetal scalp stimulation or even external acoustic stimulation. The presence of accelerations is considered a reassuring sign of fetal well-being.
- **Option C:** Accelerations are the basis for the nonstress test (NST). The presence of at least two accelerations, each lasting for 15 or more seconds above baseline and peaking at 15 or more bpm, in a 20-minute period is considered a reactive NST.
- **Option D:** The FHR is controlled by the autonomic nervous system. The inhibitory influence on the heart rate is conveyed by the vagus nerve, whereas excitatory influence is conveyed by the sympathetic nervous system. Progressive vagal dominance occurs as the fetus approaches term and, after birth, results in a gradual decrease in the baseline FHR. Stimulation of the peripheral nerves of the fetus by its own activity (such as movement) or by uterine contractions causes acceleration of the FHR.

28. Which of the following substances has abnormal values early in the course of multiple myeloma (MM)?

- A. Red blood cells
- B. Immunoglobulins
- C. White blood cells
- D. Platelets

Correct Answer: B. Immunoglobulins

- **Option B:** MM is characterized by malignant plasma cells that produce an increased amount of immunoglobulin that isn't functional.
- **Option A:** As more malignant plasma cells are produced, there's less space in the bone marrow for RBC production.
- **Options C and D:** In the late stage of the disease, platelets and WBC's are reduced as the bone marrow is infiltrated by malignant plasma cells.

29. The nurse is planning care for a client admitted to the psychiatric unit with a diagnosis of paranoid schizophrenia. Which nursing diagnosis should receive the highest priority?

- A. Risk for violence toward self or others
- B. Imbalanced nutrition: Less than body requirements
- C. Ineffective family coping
- D. Impaired verbal communication

Correct Answer: A. Risk for violence toward self or others

Because of such factors as suspiciousness, anxiety, and hallucinations, the client with paranoid schizophrenia is at risk for violence toward himself or others. Paranoid schizophrenia is characterized by predominantly positive symptoms of schizophrenia, including delusions and hallucinations. These debilitating symptoms blur the line between what is real and what isn't, making it difficult for the person to lead a typical life.

- **Option B:** The positive symptoms of schizophrenia—things like hallucinations and delusions—are less likely to go unnoticed. After the prodromal phase, the patient enters the active phase of schizophrenia, during which they experience debilitating thoughts and perceptual distortions. They may experience impaired motor or cognitive functions, including disorganized speech and disorganized or catatonic behavior.
- **Option C:** Early symptoms of schizophrenia may seem rather ordinary and could be explained by a number of other factors. This includes socializing less often with friends, trouble sleeping, irritability, or a drop in grades. During the onset of schizophrenia — otherwise known as the prodromal phase — negative symptoms mount. These negative symptoms might include an increasing lack of motivation, decreasing inability to pay attention or social isolation.
- **Option D:** The paranoia in paranoid schizophrenia stems from delusions—firmly held beliefs that persist despite evidence to the contrary — and hallucinations — seeing or hearing things that others do not. Both of these experiences can be persecutory or threatening in nature. A patient may hear a voice or voices in their head that they do not recognize as their own thoughts or internal voice. These voices can be demeaning or hostile, driving a person to do things they would not do otherwise.

30. A man is brought to the hospital by his wife, who states that for the past week her husband has refused all meals and accused her of trying to poison him. During the initial interview, the client's speech, only partly comprehensible, reveals that his thoughts are controlled by delusions that he is possessed by the devil. The physician diagnoses paranoid schizophrenia. Schizophrenia is best described as a disorder characterized by:

- A. Disturbed relationships related to an inability to communicate and think clearly.
- B. Severe mood swings and periods of low to high activity.
- C. Multiple personalities, one of which is more destructive than the others.
- D. Auditory and tactile hallucinations.

Correct Answer: A. Disturbed relationships related to an inability to communicate and think clearly.

Schizophrenia is best described as one of a group of psychotic reactions characterized by disturbed relationships with others and an inability to communicate and think clearly. Schizophrenic thoughts, feelings, and behavior commonly are evidenced by withdrawal, fluctuating moods, disordered thinking, and regressive tendencies. Traditionally, symptoms have divided into two main categories: positive

symptoms which include hallucinations, delusions, and formal thought disorders, and negative symptoms such as anhedonia, poverty of speech, and lack of motivation. The diagnosis of schizophrenia is clinical; made exclusively after obtaining a full psychiatric history and excluding other causes of psychosis.

- **Option B:** Severe mood swings and periods of low to high activity are typical of bipolar disorder. The bipolar affective disorder is a chronic and complex disorder of mood that is characterized by a combination of manic (bipolar mania), hypomanic and depressive (bipolar depression) episodes, with substantial subsyndromal symptoms that commonly present between major mood episodes.
- **Option C:** Multiple personality, sometimes confused with schizophrenia, is a dissociative personality disorder, not a psychotic illness. Dissociative identity disorder (DID) was formerly called multiple personality disorder. People with DID develop one or more alternate personalities that function with or without the awareness of the person's usual personality. DID is one of a group of conditions called dissociative disorders. Dissociative disorders are mental illnesses that involve disruptions or breakdowns of memory, consciousness or awareness, identity and/or perception — mental functions that normally work smoothly.
- **Option D:** Many schizophrenic clients have auditory hallucinations; tactile hallucinations are more common in organic or toxic disorders. Auditory hallucinations are the sensory perceptions of hearing voices without an external stimulus. This symptom is particularly associated with schizophrenia and related psychotic disorders but is not specific to it. These voices can be stressful when they are threatening, derogatory, commanding, or haunting, affecting the social and occupational functioning of an individual. They can be distressing to families and friends.

31. As a manager, she focuses her energy on both the quality of services rendered to the patients as well as the welfare of the staff of her unit. Which of the following management styles does she adopt?

- A. Country club management
- B. Organization man management
- C. Team management
- D. Authority-obedience management

Correct Answer: C. Team management

Team management has a high concern for services and high concern for staff. Team management is the ability of an individual or an organization to administer and coordinate a group of individuals to perform a task. Team management involves teamwork, communication, objective setting, and performance appraisals.

- **Option A:** The country club leader has the most concern for people. This leader assumes that if employees are happy, they will work hard. This leader's high interest in the needs and feelings of employees affects productivity. With much of the focus on employee comfort, this leader finds it difficult to punish an employee. As a result, the relationship between employee and leader is very casual, like that of friends.
- **Option B:** Management is the process of guiding the development, maintenance, and allocation of resources to attain organizational goals. This process is based on four key functional areas of the organization: planning, organizing, leading, and controlling.
- **Option D:** Authority-obedience management results from such a management style that is task-oriented, or task-motivated. The authority-obedience management style overly emphasizes

the value of completing tasks to the extent that it risks human relationships.

32. A client with mania is unable to finish her dinner. To help her maintain sufficient nourishment, the nurse should:

- A. Serve high-calorie foods she can carry with her
- B. Encourage her appetite by sending out for her favorite foods
- C. Serve her small, attractively arranged portions
- D. Allow her in the unit kitchen for extra food whenever she pleases

Correct Answer: A. Serve high-calorie foods she can carry with her

The client with mania is seldom sitting long enough to eat and burns many calories for energy. Finger foods or things a client can eat while moving around are the best options to improve nutrition. Decreasing environmental stimulation may assist the client to relax; the nurse must provide a quiet environment without noise, television, and other distractions.

- **Option B:** The client should be treated the same as other clients. Frequently remind the client to eat (e.g., “Rob, finish your pancake”, “Sandra, drink this apple juice.”). The manic client is unaware of bodily needs and is easily distracted. Needs supervision to eat.
- **Option C:** Small meals are not the correct option for this client. Encourage frequent high-calorie protein drinks and finger foods (e.g., sandwiches, fruit, milkshakes). Constant fluid and calorie replacement are needed. The client might be too active to sit at meals. Finger foods allow “eating on the run”.
- **Option D:** Allowing her into the kitchen gives her privileges that other clients do not have and should not be allowed. Monitor intake, output, and vital signs. Ensures adequate fluid and caloric intake; minimizes dehydration and cardiac collapse.

33. Which of the following ABG abnormalities should the nurse anticipate in a client with advanced COPD?

- A. Increased PaCO₂
- B. Increased PaO₂
- C. Increased pH
- D. Increased oxygen saturation

Correct Answer: A. Increased PaCO₂

As COPD progresses, the client typically develops increased PaCO₂ levels and decreased PaO₂ levels. This results in decreased pH and decreased oxygen saturation. These changes are the result of air trapping and hypoventilation. Arterial blood gas (ABG) analysis provides the best clues as to acuteness and severity of disease exacerbation.

- **Option B:** Patients with mild COPD have mild to moderate hypoxemia without hypercapnia. As the disease progresses, hypoxemia worsens and hypercapnia may develop, with the latter commonly being observed as the FEV₁ falls below 1 L/s or 30% of the predicted value. Lung mechanics and gas exchange worsen during acute exacerbations.

- **Option C:** In general, renal compensation occurs even in chronic CO₂ retainers (ie, bronchitis); thus, pH usually is near normal. Generally, consider any pH below 7.3 to be a sign of acute respiratory compromise.
- **Option D:** The compensation to respiratory acidosis consists in a secondary increase in bicarbonate concentration, and the arterial blood gas analysis is characterized by a reduced pH, increased pCO₂ (initial variation), and increased bicarbonate levels (compensatory response).

34. A nurse is assisting in performing an assessment on a client who suspects that she is pregnant and is checking the client for probable signs of pregnancy. Select all probable signs of pregnancy.

- A. Uterine enlargement
- B. Fetal heart rate detected by a nonelectric device
- C. Outline of the fetus via radiography or ultrasound
- D. Chadwick's sign
- E. Braxton Hicks contractions
- F. Ballottement

Correct Answer: A, D, E, & F.

Probable signs of pregnancy are those signs commonly noted by the physician upon examination of the patient. These signs include uterine changes, abdominal changes, cervical changes, basal body temperature, positive pregnancy test by physician, and fetal palpation.

- **Option A:** The uterine increases in width and length approximately five times its normal size. Its weight increases from 50 grams to 1,000 grams. By the twelfth week, the uterus rises above the symphysis pubis and it should reach the xiphoid process by the 36th week of pregnancy.
- **Option B:** Fetal heart sounds are positive signs of pregnancy. The fetal heart begins beating by the 24th day following conception. It is audible with a doppler by 10 weeks of pregnancy and with a fetoscope after the 16th week (see figure 3-5). It is not to be confused with uterine souffle or swishlike tone from pulsating uterine arteries. The normal fetal heart rate is 120 to 160 beats.
- **Option C:** Confirmation of fetal outline through ultrasound is a positive sign of pregnancy. The gestation sac can be seen and photographed. An embryo as early as the 4th week after conception can be identified. The fetal parts begin to appear by the 10th week of gestation.
- **Option D:** The cervix is normally firm like the cartilage at the end of the nose. The Goodell's sign is when there is marked softening of the cervix. This is present at 6 weeks of pregnancy.
- **Option E:** These contractions will, generally, cease with walking or other forms of exercise. The Braxton-Hicks contractions are distinct from contractions of true labor by the fact that they do not cause the cervix to dilate and can usually be stopped by walking.
- **Option F:** This is demonstrated during the bimanual exam at the 16th to 20th week. Ballottement is when the lower uterine segment or the cervix is tapped by the examiner's finger and left there, the fetus floats upward, then sinks back and a gentle tap is felt on the finger. This is not considered diagnostic because it can be elicited in the presence of ascites or ovarian cysts.

35. A client with a fractured tibia has a plaster-of-Paris cast applied to immobilize the fracture. Which action by the nurse indicates an understanding

of a plaster-of-Paris cast? The nurse:

- A. Handles the cast with the fingertips
- B. Petals the cast
- C. Dries the cast with a hair dryer
- D. Allows 24 hours before bearing weight

Correct Answer: D. Allows 24 hours before bearing weight

A plaster-of-Paris cast takes 24 hours to dry, and the client should not bear weight for 24 hours. After the process of applying the casting material is completed, the material will start to dry in about 10 to 15 minutes. The temperature of the skin might rise as the plaster is drying because of a chemical reaction that occurs. When plaster is used, it can take from 1 to 2 days for the cast to harden completely.

- **Option A:** The cast should be handled with the palms, not the fingertips. Use the palm of hand to apply, hold, or move cast and support on pillows after application. Uneven plaster is irritating to the skin and may result in abrasions.
- **Option B:** Petaling a cast is covering the end of the cast with cast batting or a sock, to prevent skin irritation and flaking of the skin under the cast. Trim excess plaster from edges of the cast as soon as casting is completed; prevents skin breakdown caused by prolonged moisture trapped under the cast.
- **Option C:** The client should be told not to dry the cast with a hair dryer because this causes hot spots and could burn the client. This also causes unequal drying. Promote cast drying by removing bed linen, exposing it to circulating air; pressure can cause ulcerations, necrosis, or nerve palsies. Pad (petal) the edges of the cast with waterproof tape; provides an effective barrier to cast flaking and moisture. Helps prevent the breakdown of cast material at the edges and reduce skin irritation and excoriation.

36. When taking a health history, the nurse screens for manifestations suggestive of diabetes type 1. Which of the following manifestations are considered the primary manifestations of type 1 diabetes mellitus and would be most suggestive and require follow-up investigation?

- A. Excessive intake of calories, rapid weight gain, and difficulty losing weight
- B. An increase in three areas: thirst, intake of fluids, and hunger
- C. Poor circulation, wound healing, and leg ulcers
- D. Lack of energy, weight gain, and depression

Correct Answer: B. An increase in three areas: thirst, intake of fluids, and hunger

The primary manifestations of diabetes type 1 are polyuria (increased urine output), polydipsia (increased thirst), polyphagia (increased hunger). Patients most commonly present hyperglycemic with polydipsia, polyuria, and polyphagia. Polyuria is secondary to osmotic diuresis, which is caused by hyperglycemia. Young children may present with nocturnal enuresis. Polydipsia is related to hyperosmolality and dehydration from increased urination.

- **Option A:** Obesity is the result of an imbalance between daily energy intake and energy expenditure resulting in excessive weight gain. Obesity is a multifactorial disease, caused by a myriad of genetic, cultural, and societal factors.

- **Option C:** People with uncontrolled diabetes may develop poor circulation. As circulation slows down, blood moves more slowly, which makes it more difficult for the body to deliver nutrients to wounds. As a result, the injuries heal slowly, or may not heal at all.
- **Option D:** People with type 1 diabetes are at a heightened risk for mental health issues, including diabetes distress, depression, anxiety, and disordered eating. However, these are all treatable disorders.

37. Nurse Krina recognizes that the suicidal risk for depressed client is greatest:

- A. As their depression begins to improve.
- B. When their depression is most severe.
- C. Before any type of treatment is started.
- D. As they lose interest in the environment.

Correct Answer: A. As their depression begins to improve

At this point, the client may have enough energy to plan and execute an attempt. All patients with depression should be evaluated for suicidal risk. Any suicide risk must be given prompt attention which could include hospitalization or close and frequent monitoring. Major depression has very high morbidity and mortality contributing to high rates of suicide. Even though effective drug treatment is available, nearly 50% may not initially respond. Complete remission is not common but at least 40% achieve partial remission in 12 months. Depression accounts for nearly 40,000 cases of suicide each year in the US. The highest rate of suicides is in older men.

- **Option B:** Depression is a very common disorder encountered by the nurse practitioner, primary care provider, psychiatrist, and mental health worker, coordinating as an interprofessional healthcare team. The disorder has extremely high morbidity including the risk of suicide. All healthcare workers should be knowledgeable about this disorder and refer the patient to a psychiatrist if there is a risk of self-harm.
- **Option C:** The treatment of a suicidal patient involves a 2-phase process. First and foremost, the patient's safety must be assured; this is the intervention. Intervention is based on the application of risk factors coupled with a clinical inquiry. The second step is treatment aimed at diagnosing and treating the underlying mental disorder.
- **Option D:** Determine whether the person has any thoughts of hurting him or herself. Suicidal ideation is highly linked to completed suicide. Some inexperienced clinicians have difficulty asking this question. They fear the inquiry may be too intrusive or that they may provide the person with an idea of suicide. In reality, patients appreciate the question as evidence of the clinician's concern. A positive response requires further inquiry.

38. Amphetamines and amphetamine-like compounds are most commonly used for:

- A. Narcolepsy
- B. Attention deficit disorder
- C. Exogenous obesity
- D. All of the above

Correct Answer: D. All of the above

The most common uses of amphetamines and amphetamine-like compounds are narcolepsy, exogenous obesity, and attention deficit disorder. Amphetamine is FDA-approved for the treatment of attention-deficit/hyperactivity disorder (ADHD) and narcolepsy. It has indications as a first-line agent for ADHD in adults and children six years of age and older. Amphetamine is also a second-line agent for the treatment of narcolepsy.

- **Option A:** Patients with narcolepsy generally benefit from divided doses and may require an early afternoon dose to control daytime sleepiness. Dosages usually range from 5 mg to 40 mg daily and should not exceed 60 mg, which is the maximum dose for certain adults.
- **Option B:** The choice of agent for initial therapy is based on cost, patient preference, and concern for abuse. Dextroamphetamine is the only amphetamine medication FDA-approved for use in children younger than six years, but most current guidelines recommend behavioral therapy alone in preschool-aged children with ADHD symptoms.
- **Option C:** Lisdexamfetamine, a long-acting amphetamine medication, is FDA-approved for the treatment of a binge-eating disorder. Lisdexamfetamine may be preferred if there is increased concern for abuse by the patient or a household member, as its chemically-phased release allows for once-daily dosing and may theoretically deter abuse. Lisdexamfetamine is available as capsules or chewable tablets, and typical daily dosages range from 20 mg to 70 mg.

39. 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.

40. Nurse Jonel is providing information to a community group about violence in the family. Which statement by a group member would indicate a need to provide additional information?

- A. "Abuse occurs more in low-income families".
- B. "Abusers are often jealous or self-centered".
- C. "Abusers use fear and intimidation".
- D. "Abusers usually have poor self-esteem".

Correct Answer: A. "Abuse occurs more in low-income families"

Personal characteristics of an abuser include low self-esteem, immaturity, dependence, insecurity, and jealousy. Risk factors for domestic and family violence include individual, relationship, community, and societal issues. There is an inverse relationship between education and domestic violence. Lower education levels correlate with more likely domestic violence. Childhood abuse is commonly associated with becoming a perpetrator of domestic violence as an adult. Perpetrators of domestic violence commonly repeated acts of violence with new partners. Drug and alcohol abuse greatly increases the incidence of domestic violence.

- **Option B:** Children who are victims or witness domestic and family violence may believe that violence is a reasonable way to resolve a conflict. Males who learn that females are not equally respected are more likely to abuse females in adulthood. Females who witness domestic violence as children are more likely to be victimized by their spouses. While females are often the victim of domestic violence, gender roles can be reversed.
- **Option C:** Domination may include emotional, physical, or sexual abuse that may be caused by an interaction of situational and individual factors. This means the abuser learns violent behavior from their family, community, or culture. They see violence and are victims of violence.
- **Option D:** Domestic and family violence has no boundaries. This violence occurs in intimate relationships regardless of culture, race, religion, or socioeconomic status. All healthcare professionals must understand that domestic violence, whether in the form of emotional, psychological, sexual, or physical violence, is common in our society and should develop the ability to recognize it and make the appropriate referral.

41. The physician has ordered cooling measures for a child with a fever who is likely to be discharged when the temperature comes down. Which task would be appropriate to delegate to a nursing assistant?

- A. Prepare and administer a tepid sponge bath
- B. Explain the need for giving cool fluids
- C. Assist the child in removing outer clothing
- D. Advise the parent to use acetaminophen (Tylenol) instead of aspirin

Correct Answer: C. Assist the child in removing outer clothing.

The nursing assistant can help with the removal of outer clothing, which allows the heat to dissipate from the child's skin. 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. In other words, the nurse who delegates aspects of care to other members of the nursing team must balance the needs of the client with the abilities of those to which the nurse is delegating tasks and aspects of care, among other things such as the scopes of practice and the policies and procedures within the particular healthcare facility.

- **Option A:** Tepid baths are not usually given because of the possibility of shivering and rebound. Registered nurses who assign, delegate, and/or provide nursing care to clients and groups of clients must report all significant changes that occur in terms of the client and their condition. For example, a significant change in a client's laboratory values requires that the registered nurse report this to the nurse's supervisor and doctor.
- **Option B:** Explaining is a teaching function only appropriate for a registered nurse. The staff members' levels of education, knowledge, past experiences, skills, abilities, and competencies are also evaluated and matched with the needs of all of the patients in the group of patients that will be cared for.
- **Option D:** Advising is a teaching function that is the responsibility of the registered nurse. Delegation should be done according to the differentiated practice for each of the staff members. A patient care technician, a certified nursing assistant, a licensed practical nurse, an associate degree registered nurse, and a bachelor's degree registered nurse should not be delegated to the same aspects of nursing care.

42. Kris with a history of chronic infection of the urinary system complains of urinary frequency and burning sensation. To figure out whether the current problem is of renal origin, the nurse should assess whether the client has discomfort or pain in the:

- A. Urinary meatus
- B. Pain in the labium
- C. Suprapubic area
- D. Right or left costovertebral angle

Correct Answer: D. Right or left costovertebral angle

Discomfort or pain is a problem that originates in the kidney. It is felt at the costovertebral angle on the affected side. Flank or costovertebral angle (CVA) tenderness is most commonly unilateral over the involved kidney, although bilateral discomfort may be present. Discomfort varies from absent to severe. This finding is usually not subtle and may be elicited with mild or moderately firm palpation.

- **Option A:** Pain or discomfort in the urinary meatus can also be indicative of urethritis or acute urinary tract infection. In both men and women, common causes of urethral pain include sexually transmitted diseases (STDs) such as chlamydia, local irritation from soaps or spermicides, and urinary tract infections (UTIs). In men, prostatitis isn't an uncommon cause, whereas in women, vaginal dryness due to menopause can be an issue.
- **Option B:** Pain in the labium can be due to a swollen labia or vulva. Chronic yeast infections and bacterial infections can both cause pain that ranges from mild discomfort and itching to severe burning or throbbing. Viral and bacterial infections, such as bacterial vaginosis and the herpes simplex virus, can also cause vulvar pain or discomfort.
- **Option C:** Suprapubic pain has a wide variety of causes, and can include pyelonephritis, perinephric abscess, and nephrolithiasis. Gynecological causes are common with suprapubic pain.

Suprapubic pain happens in the lower abdomen near where the hips and many important organs, such as the intestines, bladder, and genitals, are located. Suprapubic pain can have a wide variety of causes, so the doctor may need to do tests of vital functions before diagnosing the underlying cause.

43. A nurse is monitoring a group of clients for acid-base imbalances. Which clients are at highest risk for metabolic acidosis? Select all that apply.

- A. Severely anxious client
- B. Pneumonia client
- C. Diabetic Mellitus client
- D. Malnourished client
- E. Asthma client
- F. Renal failure client

Correct Answer: C, D, & F.

Diabetes mellitus, malnutrition, and renal failure lead to metabolic acidosis because of the increasing acids in the body. Options A, B, and E are respiratory problems, not metabolic, and result in either respiratory acidosis or respiratory alkalosis.

- **Option A:** Alveolar hyperventilation leads to a decreased partial pressure of arterial carbon dioxide (PaCO₂). In turn, the decrease in PaCO₂ increases the ratio of bicarbonate concentration to PaCO₂ and, thereby, increases the pH level; thus the descriptive term respiratory alkalosis.
- **Option B:** Any condition which decreases pulmonary compliance causes a sensation of dyspnea. Respiratory alkalosis is commonly found in patients with asthma, pneumonia & pulmonary embolism.
- **Option C:** Diabetic ketoacidosis (DKA) is a widely known acute metabolic complication of diabetes mellitus (DM), which can be potentially fatal. It is not difficult to diagnose when a patient with DM comes with symptoms such as coma, fruity breath, hyperglycemia, acidosis, and tachypnea.
- **Option D:** Metabolic acidosis, a common condition in patients with renal failure, may be linked to protein-energy malnutrition (PEM) and inflammation, together also known as malnutrition-inflammation complex syndrome (MICS).
- **Option E:** Acute asthmatic crisis is usually accompanied by hyperventilation and hypocapnia with respiratory alkalosis. However, it seems that mild, asymptomatic asthma is also associated with hypocapnia.
- **Option F:** The buildup of acid in the body due to kidney disease or kidney failure is called metabolic acidosis. When the body fluids contain too much acid, it means that the body is either not getting rid of enough acid, is making too much acid, or cannot balance the acid in your body.

44. Nurse Brian is developing a plan of care for marrow suppression, the major dose-limiting adverse reaction to floxuridine (FUDR). How long after drug administration does bone marrow suppression become noticeable?

- A. 24 hours
- B. 2 to 4 days

- C. 7 to 14 days
- D. 21 to 28 days

Correct Answer: C. 7 to 14 days

- Bone marrow suppression becomes noticeable 7 to 14 days after floxuridine administration. Bone marrow recovery occurs in 21 to 28 days.

45. Which finding indicates that fluid resuscitation has been successful for a client with a burn injury?

- A. Hematocrit = 60%
- B. Heart rate = 130 beats/min
- C. Increased peripheral edema
- D. Urine output = 50 mL/hr

Correct Answer: D. Urine output = 50 mL/hr

The fluid remobilization phase improves renal blood flow, increases diuresis, and restores blood pressure and heart rate to more normal levels, as well as laboratory values. This phase occurs on days 1-3 and requires an accurate fluid resuscitation and thorough evaluation for other injuries and comorbid conditions.

- **Option A:** Hematocrit can indirectly reflect the resuscitation effect in the burn shock stage. Whether hematocrit level can be lowered to 0.45-0.50 during the first 24 hours after burn may be an important index for evaluation of fluid resuscitation effect in the early shock stage after severe burn.
- **Option B:** The average daily heart rate was elevated in burn patients up to two years post-burn. Heart rate was elevated despite any afforded resuscitative efforts. While research data are up to two years post-injury, the heart rate of severely burned children was still 120% of predicted compared to normal values for children.
- **Option C:** Swelling tends to occur soon after injury and generally decreases after 48–72 hours, although this timescale can vary. The extent and location of the swelling will depend on how the burn was caused and the location and depth of the burn injury. It is very important that the swelling is reduced as soon as possible.

46. The A. digoxin (Lanoxin). toxic antiarrhythmic agent is:

- A. digoxin (Lanoxin).
- B. lidocaine (Xylocaine).
- C. amiodarone (Cordarone).
- D. quinidine (Cardioquin).

Correct Answer: C. amiodarone (Cordarone).

This is the most toxic drug and should be used only if other less toxic agents have been tried. Amiodarone is one of the most commonly used anti-arrhythmic drugs. While the United States FDA has labeled amiodarone for the treatment of life-threatening ventricular arrhythmias, the drug is commonly used off-label to treat supraventricular tachyarrhythmias such as atrial fibrillation as well as for the

prevention of ventricular tachyarrhythmias (VTs) in high-risk patients.

- **Option A:** Digoxin, on the other hand, is cardiotoxic, not an antiarrhythmic agent. Digoxin comes from the foxgloves plant known as *Digitalis purpurea*. It is a cardiotoxic glycoside and belongs to the digitalis class. It increases the force of contraction of the heart by reversibly inhibiting the activity of the myocardial Na-K ATPase pump, an enzyme that controls the movement of ions into the heart. Digoxin has vagomimetic effects on the AV node. By stimulating the parasympathetic nervous system, it slows electrical conduction in the atrioventricular node, therefore, decreases the heart rate.
- **Option B:** The drug is commonly used for local anesthesia, often in combination with epinephrine (which acts as a vasopressor and extends its duration of action at a site by opposing the local vasodilatory effects of lidocaine). As with other local anesthetics, the site of action of lidocaine is a sodium ion channel on the internal surface of nerve cell membranes.
- **Option D:** Quinine is a derivative of the bark of the South American cinchona tree. Quinidine is a stereoisomer of quinine; it is a “class 1a antiarrhythmic drug” and also an antimalarial agent. Class 1a antiarrhythmic agents (for example – quinidine, procainamide, disopyramide, ajmaline) work by inhibiting the fast inward sodium current, depressing the phase 0 of the action potential hence dampening the excitability of cardiac muscles which in turn prolongs the action potential and decreases automaticity.

47. When interviewing the parents of an injured child, which of the following is the strongest indicator that child abuse may be a problem?

- A. The injury isn't consistent with the history or the child's age.
- B. The mother and father tell different stories regarding what happened.
- C. The family is poor.
- D. The parents are argumentative and demanding with emergency department personnel.

Correct Answer: A. The injury isn't consistent with the history or the child's age.

When the child's injuries are inconsistent with the history given or impossible because of the child's age and developmental stage, the emergency department nurse should be suspicious that child abuse is occurring. Physical indicators may include injuries to a child that are severe, occur in a pattern or occur frequently. These injuries range from bruises to broken bones to burns or unusual lacerations. The child may present for care unrelated to the abuse, and the abuse may be found incidentally.

- **Option B:** The parents may tell different stories because their perception may be different regarding what happened. If they change their story when different health care workers ask the same question, this is a clue that child abuse may be a problem. Physical abuse should be considered in the evaluation of all injuries of children. A thorough history of present illness is important to make a correct diagnosis. Important aspects of the history-taking involve gathering information about the child's behavior before, during, and after the injury occurred. History-taking should include the interview of each caretaker separately and the verbal child, as well. The parent or caretaker should be able to provide their history without interruptions in order not to be influenced by the physician's questions or interpretations.
- **Option C:** Child abuse occurs in all socioeconomic groups. All races, ethnicities, and socioeconomic groups are affected by child abuse with boys and adolescents more commonly affected. Infants tend to have increased morbidity and mortality with physical abuse. Multiple factors increase a child's risk of abuse. These include risks at an individual level (child's disability, unmarried mother, maternal smoking or parent's depression); risks at a familial level (domestic

violence at home, more than two siblings at home); risks at a community level (lack of recreational facilities); and societal factors (poverty).

- **Option D:** Parents may argue and be demanding because of the stress of having an injured child. To diagnose a patient with child maltreatment is difficult since the victim may be nonverbal or too frightened or severely injured to talk. Also, the perpetrator will rarely admit to the injury, and witnesses are uncommon. Physicians will see children of maltreatment in a range of ways that include the perpetrators may be concerned that the abuse is severe and bring in the patient for medical care.

48. A nurse is giving discharge instructions to a client who is receiving a bulk-forming laxative as part of the home medications. All of which are examples of bulk-forming laxative, except?

- A. docusate Sodium (Colace)
- B. methylcellulose (Citrucel)
- C. polycarbophil (Fibercon)
- D. psyllium (Metamucil)

Correct Answer: A. Docusate Sodium (Colace)

Docusate Sodium (Colace) is an example of a surfactant laxative that softens the stool by drawing more water and fat into poo.

- **Options B, C, & D:** These are common examples of bulk-forming laxatives. They retain fluid in the poo and increase the weight or bulk of the stool.

49. The nurse is caring for a client with an autoimmune disorder at a medical clinic, where alternative medicine is used as an adjunct to traditional therapies. Which information should the nurse teach the client to help foster a sense of control over his symptoms?

- A. Pathophysiology of disease process.
- B. Principles of good nutrition.
- C. Side effects of medications.
- D. Stress management techniques.

Correct Answer: D. Stress management techniques

In autoimmune disorders, stress and the response to stress can exacerbate symptoms. Stress management techniques can help the client reduce the psychological response to stress, which in turn will help reduce the physiologic stress response. This will afford the client an increased sense of control over his symptoms.

- **Option A:** Correctly prioritizing patient care is an essential good nursing practice. A nurse with multiple patients needs to determine the order that they will be seen. If a patient presents with multiple symptoms, the nurse must know which to address first. Understanding pathophysiology is essential for the critical thinking required by nurses to prioritize and deliver patient care. It will allow the nurse to recognize critical changes in the patient's status and aid in making the correct judgments in the clinical setting.

- **Option B:** Beginning with a discussion of basic health concepts and then explaining how nutrition affects our bodies is a good strategy. Nutrition is how food affects the health of the body. Food is essential—it provides vital nutrients for survival, and helps the body function and stay healthy. Food consists of macronutrients including protein, carbohydrate, and fat that not only offer calories to fuel the body and give it energy but play specific roles in maintaining health. Food also supplies micronutrients (vitamins and minerals) and phytochemicals that don't provide calories but serve a variety of critical functions to ensure the body operates optimally.
- **Option C:** The nurse can address the remaining answer choices in her teaching about the client's disease and treatment; however, knowledge alone will not help the client to manage his stress effectively enough to control symptoms. It's easy for patients to make significant mistakes with their medications. We know this because statistics show that every minute, around three Americans call a poison control center because they have done just that. Furthermore, data shows that the rate of serious mistakes is on the rise, with many errors leading to a hospital stay. While mistakes are inevitable, clinicians can help reduce their likelihood. That's where the importance of medication education for patients comes in.

50. A man brings his elderly wife to the emergency department. He states that she has been vomiting and has had diarrhea for the past two days. She appears lethargic and is complaining of leg cramps. What should the nurse do first?

- A. Start an IV.
- B. Review the results of serum electrolytes.
- C. Offer the woman foods that are high in sodium and potassium content.
- D. Administer an antiemetic.

Correct Answer: B. Review the results of serum electrolytes.

Further assessment is needed to determine appropriate action. While the nurse may perform some of the interventions in options one, three, and four, assessment is needed initially. Electrolyte abnormalities may be addressed on an individual level, although often these are caused by an overall fluid volume depletion which, when corrected, will also cause electrolytes to normalize. Both saline and lactated Ringer's solutions appear to be effective for the treatment of dehydration due to viral gastroenteritis.

- **Option A:** The most important goal of treatment is to maintain hydration status and effectively counter fluid and electrolyte losses. Fluid therapy is a fundamental part of treatment. Intravenous fluids may be administered to those individuals who appear dehydrated or to those unable to tolerate oral fluids.
- **Option C:** No specific nutritional recommendations are universal for patients with viral gastroenteritis. A diet of banana, rice, apples, tea, and toast is often advised, but several studies have failed to show any significant outcome difference when compared to regular diets.
- **Option D:** Antiemetic medications such as ondansetron or metoclopramide may be used to assist with controlling nausea and vomiting symptoms. Patients demonstrating severe dehydration or intractable vomiting may require hospital admission for continued intravenous fluids and careful monitoring of electrolyte status.

51. Nurse Monet is caring for a female client who has suicidal tendencies. When accompanying the client to the restroom, Nurse Monet should...

- A. Give her privacy.
- B. Allow her to urinate.
- C. Open the window and allow her to get some fresh air.
- D. Observe her.

Correct Answer: D. Observe her.

The nurse has a responsibility to continuously observe the acutely suicidal client. The nurse should watch for clues, such as communicating suicidal thoughts, and messages; hoarding medications and talking about death. First and foremost, the patient's safety must be assured; this is the intervention. Intervention is based on the application of risk factors coupled with a clinical inquiry.

- **Option A:** The individual must not be left alone. In the ED, such a recommendation is handled easily by hospital security personnel. In other settings, summon assistance quickly. In an isolated place, call 911. Involve family or friends; they can remain with the patient while treatment arrangements are made.
- **Option B:** The suicidal patient should be treated initially in a secure, safe, and highly supervised place. Inpatient care at a hospital offers one of the best settings. Most managed care companies recognize the medical necessity of hospitalization in situations in which the suicide danger is acute.
- **Option C:** Remove anything that the patient may use to hurt or kill him or herself. Remove sharp or potentially dangerous objects. Ask the patient for any weapon, such as knives or pills, and secure them away from the patient. A study of the association between the provision of mental health services and suicide rates found that removing ligature points (places where things like ropes could be attached to) was associated with significant reductions in the overall psychiatric inpatient suicide rate and in the rate of inpatient suicide by hanging.

52. He plans to use a Likert Scale to determine:

- A. Degree of agreement and disagreement
- B. Compliance to expected standards
- C. Level of satisfaction
- D. Degree of acceptance

Correct Answer: A. Degree of agreement and disagreement

Likert scale is a 5-point summated scale used to determine the degree of agreement or disagreement of the respondents to a statement in a study. The Likert scale question is a psychometric scale where questions based on this scale are used in a survey. It is one of the most widely used question types in a survey. In a Likert scale survey, respondents don't choose between 'yes/no,' there are specific choices based on 'agreeing' or 'disagreeing' on a particular survey question.

- **Option B:** A compliance survey captures statements of compliance on specific issues from various constituencies. Using an online survey to gather such declaration or representation makes the process extremely efficient.
- **Option C:** A numeric scale is a type of rating scale that requires the respondent to provide his or her feedback in terms of numerical values. This type of rating scale equates comparative survey response options to an ordered set of numerical values so that respondents can quantify their opinions.

- **Option D:** A multi-checkbox scale is a type of rating scale that lists different positive and negative attributes that describe a survey respondent's perception of a product, service, or experience. The multi-checkbox scale is often used to assess a brand's attitude, rate a user's experience, or determine the quality of a product.

53. When providing family therapy, the nurse analyzes the functioning of healthy family systems. Which situations would not increase stress on a healthy family system?

- A. An adolescent's going away to college
- B. The birth of a child
- C. The death of a grandparent
- D. Parental disagreement

Correct Answer: D. Parental disagreement

In a functional family, parents typically do not agree on all issues and problems. Open discussion of thoughts and feelings is healthy, and parental disagreement should not cause system stress. Families that eat together regularly communicate (as long as the phones and TVs are turned off). They like to share feelings with each other and cue into each other's feelings. Put-downs and sarcasm is rare.

- **Option A:** A crisis can sometimes be quite obvious, such as a person losing his or her job, getting divorced, or being involved in some type of accident. In other cases, a personal crisis might be less apparent but can still lead to dramatic changes in behavior and mood.
- **Option B:** Developmental crises occur as part of the process of growing and developing through various periods of life. Sometimes a crisis is a predictable part of the life cycle, such as the crisis described in Erikson's stages of psychosocial development.
- **Option C:** If you are coping with a crisis, whether it's emotional or situational, there are things that you can do to help ensure your psychological and physical well-being during this difficult time of your life. It's important to lean on friends, family, and loved ones during a crisis, but you should also seek professional help if you need it. Consider talking to your doctor about what you are dealing with.

54. The fetal heartbeat should be monitored every 15 minutes during the 2nd stage of labor. The characteristic of a normal fetal heart rate is:

- A. The heart rate will decelerate during a contraction and then go back to its pre-contraction rate after the contraction.
- B. The heart rate will accelerate during a contraction and remain slightly above the pre-contraction rate at the end of the contraction.
- C. The rate should not be affected by the uterine contraction.
- D. The heart rate will decelerate at the middle of a contraction and remain so for about a minute after the contraction.

Correct Answer: A. The heart rate will decelerate during a contraction and then go back to its pre-contraction rate after the contraction.

The normal fetal heart rate will decelerate (go down) slightly during a contraction because of the compression on the fetal head. However, the heart rate should go back to the pre-contraction rate as soon as the contraction is over since the compression on the head has also ended.

- **Option B:** The presence of accelerations is considered a reassuring sign of fetal well-being. An acceleration pattern preceding or following a variable deceleration (the “shoulders” of the deceleration) is seen only when the fetus is not hypoxic.
- **Option C:** Uterine contractions can compress the blood vessels in the uterus, potentially interfering in the transfer of oxygen to the placenta and the baby. Contractions can also compress the umbilical cord, which may affect the flow of oxygenated blood to the baby.
- **Option D:** Early decelerations are caused by fetal head compression during uterine contraction, resulting in vagal stimulation and slowing of the heart rate. This type of deceleration has a uniform shape, with a slow onset that coincides with the start of the contraction and a slow return to the baseline that coincides with the end of the contraction.

55. Gold compounds are contraindicated in clients with:

- A. Liver dysfunction
- B. Cardiac disease
- C. Preexisting dermatitis
- D. Rheumatoid arthritis

Correct Answer: A. Liver dysfunction

An adverse reaction to gold compounds is liver toxicity; therefore, use care in clients with preexisting liver dysfunction.

- **Option B:** Gold compounds have been shown to cause tumors and cancer of the kidney when given to animals in large amounts for a long time. However, these effects have not been reported in humans receiving gold compounds for arthritis. If there are any questions about this, check with the doctor.
- **Option C:** Gold compounds may cause some people to become more sensitive to sunlight than they are normally. These people may break out in a rash after being in the sun, or a skin rash that is already present may become worse.
- **Option D:** Immediately following injection of this medicine, side effects such as dizziness, feeling faint, flushing or redness of the face, nausea or vomiting, increased sweating, or unusual weakness may occur. These will usually go away after the client lies down for a few minutes. If any of these effects continue or become worse, or if you notice any other effects within 10 minutes or so after receiving an injection, tell a health care professional right away.

56. A 68-year-old male with a history of hypertension and diabetes has undergone a cardiac catheterization to evaluate potential coronary artery disease. He has a known allergy to iodine-based contrast agents, which required premedication with corticosteroids and antihistamines. The procedure was successful, but the patient experienced brief hypotension during the administration of the contrast material. The patient has been transferred to the cardiac step-down unit for observation, and the nurse is aware of the potential complications that can arise in the initial 24 hours post-procedure. Which

complication should the nurse monitor closely during this period?

- A. Persistent angina despite being at rest and receiving nitroglycerin
- B. Thrombus formation leading to decreased peripheral pulses and cyanosis
- C. Dizziness accompanied by a sudden drop in blood pressure when standing
- D. Gradual decrease in blood pressure with no other symptoms

Correct Answer: B. Thrombus formation

In the initial 24 hours after a cardiac catheterization, the nurse should closely monitor for thrombus formation. Thrombus formation at the catheterization site can lead to serious complications, such as decreased blood flow to the extremities or embolization to other parts of the body. While the other options (angina at rest, dizziness, and falling blood pressure) can be potential concerns, thrombus formation is the most critical complication to monitor for during the immediate post-procedure period.

57. Which information should be reported to the state Board of Nursing?

- A. The facility fails to provide literature in both Spanish and English.
- B. The narcotic count has been incorrect on the unit for the past 3 days.
- C. The client fails to receive an itemized account of his bills and services received during his hospital stay.
- D. The nursing assistant assigned to the client with hepatitis fails to feed the client and give the bath.

Correct Answer: B. The narcotic count has been incorrect on the unit for the past 3 days.

General advice from the Department of Health is that stocks of controlled drugs should be kept to the minimum required to meet the clinical needs of patients. They should be stored securely in a locked cabinet or safe to prevent unauthorised access, with the keys held in a safe place.

- **Option A:** The Joint Commission conducts inspections with two main objectives: To evaluate the healthcare organization using TJC performance measures and standards. To educate and guide the organization's staff in "good practices" to help improve the organization's performance.
- **Option C:** The Joint Commission on Accreditation of Hospitals will probably be interested in the problem in answer A. The Joint Commission offers many benefits to their members. They help members organize and strengthen their patient improvement programs and safety efforts. They raise health care consumer and community confidence in the quality of the organization's care, services and treatment. This provides a competitive edge in the healthcare industry and a proven framework for organizational management. The Joint Commission helps to reduce risk management, liability insurance, and employee turnover costs.
- **Option D:** The failure of the nursing assistant to care for the client with hepatitis might result in termination but is not of interest to the Joint Commission. The Joint Commission monitors and advocates for legislation that promotes better patient safety. When it comes to state legislation, The Joint Commission collaborates with patient safety authorities and state regulatory bodies to minimize unrealistic expectations and reform outdated rules. They push state regulatory bodies to rely more on private accreditation instead of mandatory state licensure inspections.

58. A 69-year-old client appears thin and cachectic. He's short of breath at rest and his dyspnea increases with the slightest exertion. His breath sounds are

diminished even with deep inspiration. These signs and symptoms fit which of the following conditions?

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

Correct Answer: D. Emphysema

In emphysema, the wall integrity of the individual air sacs is damaged, reducing the surface area available for gas exchange. Very little air movement occurs in the lungs because of bronchial collapse, as well. In the early stages of the disease, the physical examination may be normal. Patients with emphysema are typically referred to as “pink puffers,” meaning cachectic and non-cyanotic. Expiration through pursed lips increases airway pressure and prevents airway collapse during respiration, and the use of accessory muscles of respiration indicates advanced disease.

- **Option A:** In ARDS, the client’s condition is more acute and typically requires mechanical ventilation. Clients with ARDS are acutely short of breath and require emergency care. The physical examination will include findings associated with the respiratory system, such as tachypnea and increased effort to breathe. Systemic signs may also be evident depending on the severity of illness, such as central or peripheral cyanosis resulting from hypoxemia, tachycardia, and altered mental status. Despite 100% oxygen, patients have low oxygen saturation.
- **Option B:** In asthma, wheezing is prevalent. Patients will usually give a history of a wheeze or a cough, exacerbated by allergies, exercise, and cold. There is often diurnal variation, with symptoms being worse at night. There may be some mild chest pain associated with acute exacerbations. Many asthmatics have nocturnal coughing spells but appear normal in the daytime.
- **Option C:** The most common symptom of patients with chronic bronchitis is a cough. The history of a cough typical of chronic bronchitis is characterized to be present for most days in a month lasting for 3 months with at least 2 such episodes occurring for 2 years in a row. A productive cough with sputum is present in about 50% of patients.

59. During a routine checkup, Nurse Marianne assesses a male client with acquired immunodeficiency syndrome (AIDS) for signs and symptoms of cancer. What is the most common AIDS-related cancer?

- A. Squamous cell carcinoma
- B. Multiple myeloma
- C. Leukemia
- D. Kaposi’s sarcoma

Correct Answer: D. Kaposi’s sarcoma

Kaposi’s sarcoma is the most common cancer associated with AIDS.

- **Option A:** It is suggested that the immune-suppression results in co-infection with the papilloma virus. The immunosuppression causes reduction in the effectiveness of the immune surveillance system resulting in growth of the tumor.

- **Option B:** Multiple myeloma is a very uncommon neoplasm complicating HIV infection but when it occurs, it is associated with an aggressive course and a worse prognosis.
- **Option C:** Untreated HIV infection causes AIDS and this major impairment in the immune system is associated with an increased risk of cancer, including a number of “solid tumor” cancers and non-Hodgkin lymphoma, but also Hodgkin lymphoma, myeloma, and leukemia.

60. A nurse is preparing to deliver a food tray to a Jewish client. The nurse checks the food on the tray and notes that the client has received a hamburger and whole milk as a beverage. Which is the appropriate action for the nurse?

- A. Ask the dietary department to replace the hamburger with crabs.
- B. Replace the whole milk with fat-free milk.
- C. Call the dietary department and ask for a new meal tray.
- D. Deliver the designated food tray to the client.

Correct Answer: C. Call the dietary department and ask for a new meal tray.

“You may not cook a young animal in the milk of its mother” -Torah says (Ex.23:19). From this, it is derived that milk and meat products may not be combined together. Not only may they not be cooked together, but they may not be served together on the same table and surely not eaten at the same time. This rule is followed observantly by the Jewish people so the appropriate nursing action is to call the dietary department to change the meal tray of the patient.

- **Option A:** Jewish dietary laws are known as kashrut and food that adheres to these standards is called kosher. Many mandates of the kosher diet are similar to those found in Islam. The only type of fish that may be eaten are those that have fins and scales. Therefore, shellfish, such as lobster, shrimp, oysters and crab, are prohibited.
- **Option B:** Certain parts of permitted animals may not be eaten. In the case of forbidden animals, their eggs and milk also cannot be consumed. Eating any pork or pork products, including animal shortening, is prohibited.
- **Option D:** Dairy products and meat products cannot be eaten together, because this is considered unhealthy. Cooking equipment and eating utensils that have come into contact with dairy products cannot be used with meat, and vice versa.

61. A nurse is caring for a client who is disoriented to time, place, and person and is attempting to get out of bed and pull out an intravenous (I.V.) line that is supplying hydration and antibiotics. The client has a vest restraint and bilateral soft wrist restraints. Which nursing actions would be appropriate? Select all that apply.

- A. Perform a face-to-face behavior evaluation every hour.
- B. Tie the restraints in quick-release knots.
- C. Tie the restraints to the side rails of the bed.
- D. Document the client’s condition.
- E. Document alternative methods used before the restraints were applied.

F. Document the client's response to the intervention.

Correct Answer: A, B, D, E, & F.

Preventing a client from falling or harming him- or herself is of utmost importance. Applying restraints should be a last resort when all other alternative interventions have been attempted.

- **Option A:** A face-to-face evaluation must be performed every hour. After restraint placement, patients should be reevaluated every hour and moved at regular intervals to prevent sequelae such as pressure ulcers, rhabdomyolysis, and paresthesias.
- **Option B:** Restraints should be tied in knots that can be released quickly and easily. Physical restraints encompass hand mitts, soft cloth limb restraints, leather limb restraints, enclosed beds, belts, and vests.
- **Option C:** Restraints should never be secured to side rails because doing so can cause injury if the side rail is lowered without untying the restraint. Ideally, a restraint team should include at least five people, including the team leader.
- **Options D, E, and F:** The nurse should document the client's condition, any alternative methods used before the restraints were applied, and the client's response to the interventions. Document appropriate clinical indication and have a standardized checklist prepared for staff to monitor and supply patient needs effectively.

62. Mrs. B is diagnosed with borderline personality disorder and has a nursing diagnosis of Risk for self-directed violence, which is related to the client's self-mutilation behavior (burning arms with cigarettes). Which client behavior would indicate a positive outcome of intervention?

- A. Mrs. B denies feelings of wanting to harm anyone.
- B. Mrs. B expresses feelings of anger towards others.
- C. Mrs. B requests cigarettes at appropriate times.
- D. Mrs. B tells the nurse about wanting to burn herself.

Correct Answer: D. Mrs. B tells the nurse about wanting to burn herself.

The fact that Mrs. B directly tells the nurse about wanting to self-mutilate, rather than acting on these feelings, is evidence of her responding to nursing intervention. Use a matter-of-fact approach when self-mutilation occurs. Avoid criticizing or giving sympathy. A neutral approach prevents blaming, which increases anxiety, giving special attention that encourages acting out.

- **Option A:** Identify feelings experienced before and around the act of self-mutilation. Feelings are a guideline for future intervention (e.g., rage at feeling left out or abandoned). Explore with the client what these feelings might mean.
- **Option B:** Set and maintain limits on acceptable behavior and make clear client's responsibilities. If the client is hospitalized at the time, be clear regarding the unit rules. Clear and non-punitive limit setting is essential for decreasing negative behaviors.
- **Option C:** Be consistent in maintaining and enforcing the limits, using a non-punitive approach. Consistency can establish a sense of security.

63. Which of the following situations increase the risk of lead poisoning in children?

- A. playing in the park with heavy traffic and with many vehicles passing by
- B. playing sand in the park
- C. playing plastic balls with other children
- D. playing with stuffed toys at home

Correct Answer: A. Playing in the park with heavy traffic and with many vehicles passing by.

Lead poisoning may be caused by inhalation of dust and smoke from leaded gas. It may also be caused by lead-based paint, soil, water (especially from plumbings of old houses). Approximately 535000 children between 1 and 5 years of age have an elevated blood lead concentration, defined by the Advisory Committee on Childhood Lead Poisoning Prevention of the Centers for Disease Control and Prevention (CDC) as greater than or equal to 5mcg/dL based on the 97.5 percentile of blood lead concentrations in the most recent National Health and Nutrition Examination Survey (NHANES) dataset.

- **Option B:** Several million young children in the United States live in older homes in which lead-based paint was previously used, and as this old paint ages, it peels, flakes, and crumbles into dust that settles on the interior surfaces of homes and in the soil surrounding the exterior of the home.
- **Option C:** Despite the fact that the amount of lead in paint intended for use in or on residential buildings, furniture, or children's toys in the United States has been restricted to 0.06% since 1978 and was further reduced to 0.009% in 2008, lead-based paint continues to be a major source of lead exposure in young children.
- **Option D:** Prevalence rates of children under 1 year of age with elevated blood lead concentrations are consistently lower than those in the 1 to 4 year age group, likely because lead is a cumulative toxin and because young children are more mobile and overall have more hand-to-mouth behavior compared to infants.

64. A multigravida at 38 weeks' gestation is admitted with painless, bright red bleeding and mild contractions every 7 to 10 minutes. Which of the following assessments should be avoided?

- A. Maternal vital sign
- B. Fetal heart rate
- C. Contraction monitoring
- D. Cervical dilation

Correct Answer: D. Cervical dilation

The signs indicate placenta previa and vaginal exam to determine cervical dilation would not be done because it could cause hemorrhage.

- **Option A:** Assessing maternal vital signs can help determine maternal physiologic status.
- **Option B:** Fetal heart rate is important to assess fetal well-being and should be done.
- **Option C:** Monitoring the contractions will help evaluate the progress of labor.

65. The nurse is managing care for several clients in the outpatient clinic. Among the following clients who called, which one should the nurse prioritize in responding to first?

- A. A client with hepatitis A who states, "My arms and legs are itching."
- B. A client with a cast on the right leg who states, "I have a funny feeling in my right leg."
- C. A client with osteomyelitis of the spine who states, "I am so nauseous that I can't eat."
- D. A client with rheumatoid arthritis who states, "I am having trouble sleeping."

Correct Answer: E. A client with a cast on the right leg who states, "I have a funny feeling in my right leg."

It may indicate neurovascular compromise, requiring immediate assessment.

- **Option A:** Bilirubin levels in hepatitis A may increase, and itching is a common symptom.
- **Option C:** A client feeling nauseous may require consultation but is not a priority.
- **Option D:** Clients with rheumatoid arthritis may feel pain in the affected areas at night. They may need a prescription for painkillers but it is not urgent.

66. Marco falls off his bicycle and injures his ankle. Which of the following actions shows the initial response to the injury in the extrinsic pathway?

- A. Release of Calcium
- B. Release of tissue thromboplastin
- C. Conversion of factors XII to factor XIIa
- D. Conversion of factor VIII to factor VIIIa

Correct Answer: B. Release of tissue thromboplastin

Tissue thromboplastin is released when damaged tissue comes in contact with clotting factors.

- **Option A:** Calcium is released to assist the conversion of factors X to Xa.
- **Option C:** Conversion of factors XII to XIIa are part of the intrinsic pathway.
- **Option D:** Conversion factors VIII to VIIIa are part of the intrinsic pathway.

67. An 11-year-old child diagnosed with conduct disorder is admitted to the psychiatric unit for treatment. Which of the following behaviors would the nurse assess?

- A. Restlessness, short attention span, hyperactivity.
- B. Physical aggressiveness, low-stress tolerance, disregard for the rights of others.
- C. Deterioration in social functioning, excessive anxiety, and worry, bizarre behavior.
- D. Sadness, poor appetite and sleeplessness, loss of interest in activities.

Correct Answer: B. Physical aggressiveness, low-stress tolerance disregard for the rights of others

Physical aggressiveness, low-stress tolerance, and a disregard for the rights of others are common behaviors in clients with conduct disorders. Conduct disorder (CD) is classified in the spectrum of disruptive behavior disorders which also includes the diagnosis of oppositional defiant disorder (ODD). Exhibits a pattern of behavior that violates the rights of others and disregards social norms.

- **Option A:** Restlessness, short attention span, and hyperactivity are typical behaviors in a client with attention deficit hyperactivity disorder. Attention Deficit-Hyperactivity Disorder (ADHD) is a psychiatric condition that has long been recognized as affecting children's ability to function. Individuals suffering from this disorder show patterns of developmentally inappropriate levels of inattentiveness, hyperactivity, or impulsivity.
- **Option C:** Deterioration in social functioning, excessive anxiety and worry and bizarre behaviors are typical in schizophrenic disorders. Derived from the Greek 'schizo' (splitting) and 'phren' (mind) with the term first coined by Eugen Bleuler in 1908, schizophrenia is a functional psychotic disorder characterized by the presence of delusional beliefs, hallucinations, and disturbances in thought, perception, and behavior.
- **Option D:** Sadness, poor appetite, sleeplessness, and loss of interest in activities are behaviors commonly seen in depressive disorders. 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.

68. 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.

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

- A. The client will commit to a drug-free lifestyle.
- B. The client will work with the nurse to remain safe.
- C. The client will drink plenty of fluids daily.
- D. The client will make a personal inventory of strength.

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

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

- **Option A:** Delirium tremens is the most severe form of alcohol withdrawal, and its hallmark is that of an altered sensorium with significant autonomic dysfunction and vital sign abnormalities. It includes visual hallucinations, tachycardia, hypertension, hyperthermia, agitation, and diaphoresis. Symptoms of delirium tremens can last up to seven days after alcohol cessation and may last even longer.
- **Option C:** The diagnosis of alcohol withdrawal can be made by taking an excellent history and performing a thorough physical examination. It is a clinical diagnosis based on mild, moderate, or severe symptoms. Patients with suspicion for alcohol withdrawal should be evaluated for other underlying disease processes such as dehydration, infection, cardiac issues, electrolyte abnormalities, gastrointestinal bleeding, and traumatic injury. Laboratory studies (electrolytes, blood counts) may be drawn, but will likely be nondiagnostic.
- **Option D:** Patients with prolonged altered sensorium or significant renal abnormalities should have an evaluation for the potential ingestion of another toxic alcohol. Patients who become financially strapped due to alcoholism could ingest other alcohols to become intoxicated. These can include isopropyl alcohol, commonly known as rubbing alcohol, which can lead to acidemia without ketosis as well as hemorrhagic gastritis.

70. A 58-year-old man is admitted to the emergency department following a motor vehicle accident. He suffered a direct blow to the anterior neck, raising concerns about potential laryngeal trauma. The emergency physician suspects an injury to the cartilaginous structures of the larynx. The team begins discussing the anatomy of the larynx, and a nursing instructor present at the scene decides to review respiratory anatomy with their students. They ask, “Considering the context of the injury and our discussion, which of the following descriptions regarding the larynx is correct?”

- A. The most inferior cartilage in the larynx is the epiglottis.
- B. Unlike the other cartilages of the larynx, the epiglottis consists of hyaline cartilage.
- C. The larynx contains four unpaired cartilages.
- D. When the vestibular folds come together, they prevent air from leaving the lungs.

Correct Answer: D. When the vestibular folds come together, they prevent air from leaving the lungs.

When the vestibular folds come together, they prevent air from leaving the lungs, such as when a person holds his breath. Along with the epiglottis, the vestibular folds also prevent food and liquids from entering the larynx.

- **Option A:** The most inferior cartilage of the larynx is the unpaired cricoid cartilage, which forms the base of the larynx on which the other cartilages rest.
- **Option B:** The epiglottis differs from the other cartilages in that it consists of elastic cartilage rather than hyaline cartilage.
- **Option C:** The larynx consists of an outer casing of nine cartilages that are connected to one another by muscles and ligaments. Three of the nine cartilages are unpaired, and six of them form three pairs.

71. The nurse is evaluating a client's response to hemodialysis. Which lab results will indicate the dialysis was effective? Select all that apply.

- A. Serum potassium level decreases from 5.4 to 4.6 mEq/L
- B. Cr decreases from 1.6 to 0.8 mg/dL
- C. Hgb increases from 10-12 g/dL
- D. WBC increase from 5000 to 8000/mm³
- E. BUN decreases from 110 to 90 mg/dL

Correct Answer: A, B, and E.

Primary action of hemodialysis is to clear nitrogenous waste products. Dialysis adequacy measures the effectiveness of the dialysis treatments. It is important to receive enough dialysis to feel well and minimize the side effects of kidney failure.

- **Option A:** When the kidneys do not work properly, potassium may build up in the blood. A potassium level that is too high or too low may weaken muscles and change the heart rhythm. The ideal range for potassium in a person on dialysis is 3.5-5.5.
- **Option B:** Dialysis has a positive impact on serum creatinine level and reduces its level towards normal value. Results showed that most of the patients (58%) had serum creatinine below 7 mg/dl after dialysis.
- **Option C:** The hemoglobin is frequently low in people with kidney failure because the kidneys no longer make the hormone erythropoietin. This hormone stimulates the bones to make red blood cells. The ideal level for hemoglobin should be around 10g/dl. Recent research has demonstrated that levels above 13g/dl may be harmful to patients on dialysis.
- **Option D:** Direct contact of the blood with the dialysis membrane during hemodialysis elicits a series of changes in blood cells. White blood cell count and total lymphocyte number are reduced, neutrocytes are stimulated and degranulate, platelet adhesiveness is enhanced.

- **Option E:** The BUN is a measurement of waste products in the blood. Normal values for a person with kidney failure vary according to protein intake. A client's values may range from 20-80 mg/dl when the labs are drawn prior to the dialysis treatment.

72. Which of the following definitions best describes diverticulosis?

- A. An inflamed outpouching of the intestine.
- B. A noninflamed outpouching of the intestine.
- C. The partial impairment of the forward flow of intestinal contents.
- D. An abnormal protrusion of an organ through the structure that usually holds it.

Correct Answer: B. A noninflamed outpouching of the intestine.

Diverticulosis involves a noninflamed outpouching of the intestine. Diverticulosis is a clinical condition in which multiple sac-like protrusions (diverticula) develop along the gastrointestinal tract. Though diverticula may form at weak points in the walls of either the small or large intestines, the majority occur in the large intestine (most commonly the sigmoid colon).

- **Option B:** Diverticulitis involves an inflamed outpouching. Acute diverticulitis is inflammation due to micro-perforation of a diverticulum. The diverticulum is a sac-like protrusion of the colon wall. Diverticulitis can present in about 10% to 25% of patients with diverticulosis. Diverticulitis can be simple or uncomplicated and complicated.
- **Option C:** The partial impairment of forward flow of the intestine is an obstruction. Obstruction causes dilation of the bowel proximal to the transition point and collapses distally. A result of partial or complete blockage of digested products during obstruction is emesis. Frequent emesis can lead to fluid deficits and electrolyte abnormalities.
- **Option D:** Abnormal protrusion of an organ is a hernia. A hernia occurs when an organ pushes through an opening in the muscle or tissue that holds it in place. For example, the intestines may break through a weakened area in the abdominal wall. Many hernias occur in the abdomen between the chest and hips, but they can also appear in the upper thigh and groin areas.

73. Which of the following is a positive sign of pregnancy?

- A. Fetal movement felt by mother
- B. Enlargement of the uterus
- C. (+) pregnancy test
- D. (+) ultrasound

Correct Answer: D. (+) ultrasound

A positive ultrasound will confirm that a woman is pregnant since the fetus in utero is directly visualized.

- **Option A:** The first fetal movements which are felt by the mother are called quickening. One function of these movements is to alert the pregnant woman that she has a fetus growing in her uterus. Quickening often occurs between the 16th to the 22nd week of pregnancy. This is called a presumptive sign of pregnancy as the other movements of the woman's body can mimic early fetal movements such as flatus, peristalsis, and abdominal muscle contractions.

- **Option B:** From conception to delivery, a woman's uterus can grow from the size of a pear to the size of a watermelon. But pregnancy isn't the only potential reason for an enlarged uterus. An enlarged uterus is common and can be a symptom of a variety of medical conditions, some of which require treatment.
- **Option C:** An elevated β -hCG in the absence of viable pregnancy can occur for multiple reasons and has a broad differential diagnosis including miscarriage, ectopic pregnancy, pituitary hCG production, trophoblastic disease, and phantom hCG.

74. Which of the following best reflects the frequency of reported postpartum "blues"?

- A. Between 10% and 40% of all new mothers report some form of postpartum blues.
- B. Between 30% and 50% of all new mothers report some form of postpartum blues.
- C. Between 50% and 80% of all new mothers report some form of postpartum blues.
- D. Between 25% and 70% of all new mothers report some form of postpartum blues.

Correct Answer: C. According to statistical reports, between 50% and 80% of all new mothers report some form of postpartum blues.

The ranges of 10% to 40%, 30% to 50%, and 25% to 70% are incorrect. Postpartum blues, also known as "baby blues," affect approximately 50% to 80% of new mothers.

- **Option A:** Symptoms may include mood swings with times of feeling anxious, irritable, or tearful interspersed with times of feeling well. Sleeping difficulties may also occur. The symptoms usually begin 3-4 days after delivery, worsen by days 5-7, and tend to resolve by day 12.
- **Option B:** For symptoms that last longer than 2 weeks, it is important for the individual to seek medical attention since approximately 1 in 5 women with postpartum blues develops postpartum major depression.
- **Option D:** In developed countries, PPD occurs in about 12% to 13% of postpartum women. More recently, the rates in the United States have been reported as 10% to 20%. Transculturally, the rates are estimated at 10% to 15%, with a higher rate in adolescent mothers.

75. Nurse Amy is providing care for a male client undergoing opiate withdrawal. Opiate withdrawal causes severe physical discomfort and can be life-threatening. To minimize these effects, opiate users are commonly detoxified with:

- A. Barbiturates
- B. Amphetamines
- C. Methadone
- D. Benzodiazepines

Correct Answer: C. Methadone

Methadone is used to detoxify opiate users because it binds with opioid receptors at many sites in the central nervous system but doesn't have the same deleterious effects as other opiates, such as cocaine, heroin, and morphine. 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.

- **Option A:** Acute barbiturate toxicity may occur as the result of an intentional or unintentional overdose. Barbiturates have a history of abuse, New York City Health Department data showed 8469 cases of barbiturate poisoning in the period between 1957 through 1963. Overdose of phenobarbital symptoms includes CNS depression, respiratory failure, and hemodynamic instability. No antidote exists. Treatment of an overdose includes supportive care, activated charcoal (if taken orally), and urinary alkalinization.
- **Option B:** 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. Amphetamines increase neurotransmission of dopamine (DA), serotonin (5-HT), and norepinephrine (NE) by entering neurons via the 5-HT and DA transporters and displacing storage vesicles.
- **Option D:** Benzodiazepines taken in toxic doses without other coingestants rarely cause a significant toxidrome. 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. Respiratory compromise is uncommon in isolated benzodiazepine ingestions, but if taken with coingestants such as ethanol or other drugs/medications, respiratory depression can be noted.

76. Stephanie, a 28 y.o. accident victim, requires TPN. The rationale for TPN is to provide:

- A. Necessary fluids and electrolytes to the body.
- B. Complete nutrition by the I.V. route.
- C. Tube feedings for nutritional supplementation.
- D. Dietary supplementation with liquid protein given between meals.

Correct Answer: B. Complete nutrition by the I.V. route.

TPN is given I.V. to provide all the nutrients your patient needs. Parenteral nutrition is the intravenous administration of nutrition outside of the gastrointestinal tract. Total parenteral nutrition (TPN) is when the IV administered nutrition is the only source of nutrition the patient is receiving. Total parenteral nutrition is indicated when there is an inadequate gastrointestinal function and contraindications to enteral nutrition.

- **Option A:** Enteral diet intake is preferred over parenteral as it is inexpensive and associated with fewer complications such as infection and blood clots but requires a functional GI system. TPN is a mixture of separate components which contain lipid emulsions, dextrose, amino acids, vitamins, electrolytes, minerals, and trace elements. TPN composition should be adjusted to fulfill individual patients' needs. The main three macronutrients are lipids emulsions, proteins, and dextrose.
- **Option C:** TPN isn't tube feeding. Total parenteral nutrition administration is through a central venous catheter. A central venous catheter is an access device that terminates in the superior vena cava or the right atrium and is used to administer nutrition, medication, chemotherapy, etc. Establishing this access could be through a peripherally inserted central catheter (PICC), central venous catheter, or an implanted port.

- **Option D:** TPN is not a liquid dietary supplement. A 3-in-1 solution and intravenous lipid emulsions) mixed with electrolytes, trace elements, vitamins, and water. Parenteral solution with only dextrose and amino acids with a separate intravenous lipid emulsions infusion, the 2-in-1 solution has also been previously used. Research has shown TNA to be the standard of care for adult TPN.

77. Archie is a child with iron deficiency anemia. He is required to receive elemental iron therapy at 6 mg/kg/day in three divided doses. He weighs 44 lbs. How many milligrams of iron should he receive per dose?

- A. 20 mg/dose
- B. 40 mg/dose
- C. 60 mg/dose
- D. 120 mg/dose

Correct Answer: B. 40 mg/dose

The child weighs 44 lbs, which is equal to 20 kg (1 kg=2.2 lb;44/2.2=20kg). Elemental iron therapy is ordered at 6 mg/kg/day in three doses. Therefore, the child receives 120 mg/day (6 mg/20 kg/day=120), divided into three doses (120/3), which is equal to 40 mg/dose.

- **Option A:** There are currently two forms of low-molecular-weight iron dextran available on the market in North American. Both come as injectable solutions [intravenous (IV) or intramuscular (IM)] containing 50 mg/mL of elemental iron. The incidence of toxicity relative to high-molecular-weight preparations is lower with low-molecular-weight iron dextran.
- **Option C:** As per the manufacturer, a test dose of 25 mg (0.5 mL) followed by 1 hour of observation is necessary before administering the remainder of the calculated required dose to monitor for anaphylactoid reactions. Intramuscular injections should be administered to the upper outer quadrant of the buttock using the Z – track technique (lateral displacement of skin prior to injection).
- **Option D:** If total dose calculations exceed the daily allowance of administration, smaller incremental daily doses may be used until the patient achieves the total dose requirement. All doses require administration at a maximum rate of 50 mg (1 mL) per minute. No dosage adjustments are necessary for renal and/or hepatic impairment.

78. Which electrolyte would the nurse identify as the major electrolyte responsible for determining the concentration of the extracellular fluid?

- A. Potassium
- B. Phosphate
- C. Chloride
- D. Sodium

Correct Answer: D. Sodium

Sodium is the electrolyte whose level is the primary determinant of the extracellular fluid concentration. Sodium a cation (e.g., positively charged ion), is the major electrolyte in extracellular fluid. Sodium, which is an osmotically active anion, is one of the most important electrolytes in the extracellular fluid. It

is responsible for maintaining the extracellular fluid volume, and also for regulation of the membrane potential of cells. Sodium is exchanged along with potassium across cell membranes as part of active transport.

- **Option A:** Potassium (a cation) is a major electrolyte in the intracellular fluid. Potassium is mainly an intracellular ion. The sodium-potassium adenosine triphosphatase pump has the primary responsibility for regulating the homeostasis between sodium and potassium, which pumps out sodium in exchange for potassium, which moves into the cells.
- **Option B:** Phosphate (an anion) is a major electrolyte in the intracellular fluid. Phosphate is an essential electrolyte in the human body as it constitutes about 1% of the total body weight. In an adult, the normal serum phosphate level ranges between 2.5 to 4.5 mg/d L. The normal serum levels of phosphate tend to decrease with age and its highest levels i.e., 4.5 to 8.3 mg/dL are seen in infants, about 50% higher than adults; this is because infants and children need more phosphate for their growth and development.
- **Option C:** Chloride, an anion (e.g., negatively charged ion), is also present in extracellular fluid, but to a lesser extent. Chloride is an anion found predominantly in the extracellular fluid. The kidneys predominantly regulate serum chloride levels. Most of the chloride, which is filtered by the glomerulus, is reabsorbed by both proximal and distal tubules (majorly by proximal tubule) by both active and passive transport.

79. Which of the following symptoms is expected with hemoglobin of 10 g/dl?

- A. None
- B. Pallor
- C. Palpitations
- D. Shortness of breath

Correct Answer: A. None

Mild anemia usually has no clinical signs. Palpitations, SOB, and pallor are all associated with severe anemia. Whether or not a patient becomes symptomatic depends on the etiology of anemia, the acuity of onset, and the presence of other comorbidities, especially the presence of cardiovascular disease. Most patients experience some symptoms related to anemia when the hemoglobin drops below 7.0 g/dL.

- **Option B:** Pallor is the most commonly encountered physical finding in patients with anemia. As mentioned earlier, this sign is due to the shunting of blood away from the skin and other peripheral tissues, permitting enhanced blood flow to vital organs.
- **Option C:** Hemoglobin is the protein in red blood cells that helps transport oxygen around the body. In iron deficiency, low levels of hemoglobin mean the heart has to work extra hard to carry oxygen. This may lead to irregular heartbeats or the feeling that the heart is beating abnormally fast.
- **Option D:** Hemoglobin is an iron-rich protein that helps red blood cells carry oxygen from the lungs to the rest of the body. If the client has anemia, the body does not get enough oxygen-rich blood. This can cause him to feel tired or weak. He may also have shortness of breath, dizziness, headaches, or an irregular heartbeat.

80. Your patient Maria takes NSAIDS for her degenerative joint disease, and has developed peptic ulcer disease. Which drug is useful in preventing

NSAID-induced peptic ulcer disease?

- A. calcium carbonate (Tums)
- B. famotidine (Pepcid)
- C. misoprostol (Cytotec)
- D. sucralfate (Carafate)

Correct Answer: C. misoprostol (Cytotec)

Misoprostol restores prostaglandins that protect the stomach from NSAIDS, which diminish the prostaglandins. Currently, misoprostol is FDA-approved only for the prevention and treatment of NSAID-induced gastric ulcers in patients taking NSAIDs and at high risk for ulceration. It has an indication (but not FDA approved) in the short-term treatment of active duodenal or gastric ulcers with other etiologies.

- **Option A:** Calcium carbonate is an inorganic salt primarily used in the management and treatment of low calcium conditions, GERD, CKD, and a variety of other indicated conditions. It is classified as a calcium supplement, antacid, and as a phosphate binder.
- **Option B:** Famotidine is a competitive histamine H₂-receptor antagonist (H₂RA) that binds to the H₂-receptors located on the basolateral membrane of the parietal cell in the stomach, effectively blocking histamine actions. Its pharmacologic activity results in the inhibition of gastric secretion by suppressing acid concentration and volume of gastric secretion.
- **Option D:** Sucralfate is a medication used to treat duodenal ulcers, epithelial wounds, chemotherapy-induced mucositis, radiation proctitis, ulcers in Behcet disease, and burn wounds. Sucralfate exhibits its action by forming a protective layer, increasing bicarbonate production, exhibiting anti-peptic effects, promoting tissue growth, regeneration, and repair.

81. The nurse is giving instructions to a client receiving phenytoin (Dilantin). The nurse concludes that the client has a sufficient knowledge if the client states that:

- A. "Wearing a medical alert tag is not required".
- B. "Alcohol is permitted while taking this medication".
- C. "I can take the medicine with milk".
- D. "Have the serum phenytoin level taken before giving the medication".

Correct Answer: D. "Have the serum phenytoin level taken before giving the medication".

Taking the prescribed daily dosage to keep the blood level of the drug constant and having a sample drawn for serum drug level before taking the morning dose.

- **Option A:** Wearing a medical tag allows any medical care provider to know that the client is on seizure medication.
- **Option B:** Alcohol use can increase the blood levels of phenytoin and may increase side effects.
- **Option C:** Taking it with milk will impair the absorption.

82. The nurse is preparing to discharge a multipara 24 hours after a vaginal delivery. The client is breastfeeding her newborn. The nurse instructs the client that if engorgement occurs the client should:

- A. wear a tight fitting bra or breast binder.
- B. apply warm, moist heat to the breasts.
- C. contact the nurse-midwife for a lactation suppressant.
- D. restrict fluid intake to 1000 ml daily.

Correct Answer: B. apply warm, moist heat to the breasts.

- **Option B:** Moist heat has this amazing ability to increase circulation, open milk ducts and stimulate let down – all of which encourage the milk to start flowing.
Option A: If a bra is worn, it should be big enough or stretchy enough to allow for expansion if breasts fill during the night hours; a bra that is too tight can cause soreness and potential problems such as blocked ducts.
Option C: The simplest and safest way to suppress lactation is to let milk production stop on its own.
Option D: Research has found that nursing mothers do not need to drink more fluids than what's necessary to satisfy their thirst.

83. Nurse Amy is speaking to a group of women about early detection of breast cancer. The average age of the women in the group is 47. Following the American Cancer Society guidelines, the nurse should recommend that the women:

- A. Have a mammogram annually
- B. Perform breast self-examination annually
- C. Have a hormonal receptor assay annually
- D. Have a physician conduct a clinical examination every 2 years

Correct Answer: A. Have a mammogram annually

- **Option A:** The American Cancer Society guidelines state, "Women older than age 40 should have a mammogram annually and a clinical examination at least annually [not every 2 years]."
- **Option B:** All women should perform breast self-examination monthly [not annually].
- **Option C:** The hormonal receptor assay is done on a known breast tumor to determine whether the tumor is estrogen- or progesterone-dependent.
- **Option D:** A physician checkup every 2 years will not detect early signs of breast cancer.

84. A female patient exhibits signs of heightened anxiety. Which response by the nurse is most likely to reduce the patient's anxiety?

- A. "Everything will be fine. Don't worry."
- B. "Read this manual and then ask me any questions you may have."

- C. "Why don't you listen to the radio?"
- D. "Let's talk about what's bothering you."

Correct Answer: D. "Let's talk about what's bothering you."

Anxiety may result from feelings of helplessness, isolation, or insecurity. This response helps reduce anxiety by encouraging the patient to express feelings. The nurse should be supportive and develop goals together with the patient to give the patient some control over an anxiety-inducing situation. Because the other options ignore the patient's feelings and block communication, they would not reduce anxiety.

- **Option A:** Recognize awareness of the patient's anxiety. Since a cause of anxiety cannot always be identified, the patient may feel as though the feelings being experienced are counterfeit. Acknowledgment of the patient's feelings validates the feelings and communicates acceptance of those feelings.
- **Option B:** Converse using a simple language and brief statements. Allow patients to talk about anxious feelings and examine anxiety-provoking situations if they are identifiable. Talking about anxiety-producing situations and anxious feelings can help the patient perceive the situation realistically and recognize factors leading to the anxious feelings.
- **Option C:** Assist the patient in developing new anxiety-reducing skills (e.g., relaxation, deep breathing, positive visualization, and reassuring self-statements). Discovering new coping methods provides the patient with a variety of ways to manage anxiety.

85. The primary nursing diagnosis for a female client with a medical diagnosis of major depression would be:

- A. Situational low self-esteem related to altered role
- B. Powerlessness related to the loss of idealized self
- C. Spiritual distress related to depression
- D. Impaired verbal communication related to depression

Correct Answer: D. Impaired verbal communication related to depression

Depressed clients demonstrate decreased communication because of a lack of psychic or physical energy. 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. Initially, provide activities that require minimal concentration (e.g., drawing, playing simple board games). Depressed people lack concentration and memory. Activities that have no "right or wrong" or "winner or loser" minimizes opportunities for the client to put himself/herself down.

- **Option A:** Assess the self-esteem level of the patient. Signs of low self-esteem include withdrawal from social relationships, feeling of inadequacy, neglect of personal hygiene and dress, and rejecting self which all may indicate a negative thought pattern. Allow the patient to engage in simple recreational activities, advancing to more complex activities in a group environment. The patient may feel overwhelmed at the start when participating in a group setting.
- **Option B:** 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 C:** Assess what spiritual practices have offered comfort and meaning to the client's life when not ill. Evaluates neglected areas in the person's life that, if reactivated, might add comfort and meaning during a painful depression. Suggest that the spiritual leader affiliated with the facility contact the client. Spiritual leaders are familiar with dealing with spiritual distress and can offer comfort to the client.

86. Nurse Gina understands that her client Glenda who is bulimic feels shame and guilt over binge eating and purging. This disorder is therefore considered:

- A. Ego-distorting
- B. Ego-dystonic
- C. Ego-enhancing
- D. Ego-syntonic

Correct Answer: B. Ego-dystonic

An ego-dystonic disorder is one in which the client views behaviors or symptoms as incongruent with self-image and therefore feels guilt, shame, and distress about the symptoms. Ego-dystonic refers to thoughts, impulses, and behaviors that are felt to be repugnant, distressing, unacceptable or inconsistent with one's self-concept.

- **Option A:** To say that the ego is distorted is simply to say that the mental apparatus is in a state of disordered function, and we cannot pursue this matter fruitfully unless we know exactly what part or layer of the ego is distorted and how and when and why, and with what other psychic reactions the ego-distortion is associated.
- **Option C:** Ego enhancement has been offered as the psychological mechanism that drives differences in judgments about effects on self and others. Findings indicate that although ego enhancement does not appear to directly influence either third-person perception or its relationship to support for government control, it does play a moderating role in regulating the relationship between perceived effects and support for controls, especially in the case of perceived effects on others.
- **Option D:** An ego-syntonic disorder is one which the client views behaviors as congruent with her self-image (as in anorexia nervosa). Ego-syntonic refers to instincts or ideas that are acceptable to the self; that are compatible with one's values and ways of thinking. They are consistent with one's fundamental personality and beliefs.

87. Nurse Anna is an experienced travel nurse who was recently employed and is assigned to the emergency unit. In her first week of the job, which of the following area is the most appropriate assignment for her?

- A. Triage
- B. Ambulatory section
- C. Trauma team
- D. Psychiatric care

Correct Answer: B. Ambulatory section

The ambulatory section deals with clients with relatively stable conditions. The decision of whether or not to delegate or assign is based upon the RN's judgment concerning the condition of the patient, the competence of all members of the nursing team and the degree of supervision that will be required of the RN if a task is delegated.

- **Option A:** The RN delegates only those tasks for which he or she believes the other health care worker has the knowledge and skill to perform, taking into consideration training, cultural competence, experience and facility/agency policies and procedures.
- **Option C:** This area should be filled with nurses who are experienced with hospital routines and policies and have the ability to locate equipment immediately. There is both individual accountability and organizational accountability for delegation. Organizational accountability for delegation relates to providing sufficient resources, including sufficient staffing with an appropriate staff mix.
Option D: Few places are more hectic than a Hospital Emergency Room. Clearly, delegating important nursing tasks is the only plausible way for short-staffed emergency rooms to meet the challenges of providing quality patient care. All decisions related to delegation and assignment are based on the fundamental principles of protection of the health, safety, and welfare of the public."

88. The normal umbilical cord is composed of:

- A. 2 arteries and 1 vein
- B. 2 veins and 1 artery
- C. 2 arteries and 2 veins
- D. None of the above

Correct Answer: A. 2 arteries and 1 vein

Three vessels comprise the umbilical cord: two umbilical arteries and one umbilical vein. The umbilical cord is a soft, tortuous cord with a smooth outer covering of amnion. It extends from the umbilicus of the fetus to the center of the placenta. Its length ranges from 50 cm to 60 cm, with a diameter of about 1 cm.[6] The umbilical cord is composed of a gelatinous ground substance called Wharton's jelly or substantia gelatinosa funiculi umbilicalis.

- **Option B:** The umbilical arteries carry deoxygenated blood from fetal circulation to the placenta. The two umbilical arteries converge together about at 5 mm from the insertion of the cord, forming a type of vascular connection called the Hyrtl's anastomosis. The primary function of Hartl's anastomosis is to equalize blood flow and pressure between the umbilical and placental arteries.
- **Option C:** The two umbilical arteries arise from the internal iliac arteries of the fetus and enter the umbilical cord before further branching at the level of the placenta. At the placental level, each umbilical artery bifurcates into smaller arterioles that continue to branch further to distribute blood to the chorionic villi. The capillaries of the villi fuse to form venules that converge to form the umbilical vein. The umbilical vein carries oxygenated blood and nutrients from the mother to the fetus.
- **Option D:** The umbilical cord is considered both the physical and emotional attachment between mother and fetus. This structure allows for the transfer of oxygen and nutrients from the maternal circulation into fetal circulation while simultaneously removing waste products from fetal circulation to be eliminated maternally.

89. A client with which of the following conditions may experience a dangerous or fatal side effect of theophylline?

- A. Cardiac disorder
- B. Diabetes
- C. Renal disease
- D. Hepatic disease

Correct Answer: A. Cardiac disorder

A client with a heart condition may experience dangerous stimulation from this drug. Use cautiously in patients who have cardiac arrhythmias (excluding bradyarrhythmias), as it may exacerbate arrhythmias. Theophylline should be administered cautiously with all the other choices, but the consequences are most dangerous or possibly fatal for clients with heart conditions.

- **Option B:** Use cautiously in patients with hyperthyroidism, as increased theophylline clearance may occur. Theophylline has a very narrow therapeutic window, and its interaction with various other drugs has led to the limitation of its use. The serum theophylline concentrations require monitoring directly to avoid toxicity as the adverse effects of theophylline are related to its plasma concentration and have been observed when plasma concentrations exceed 20 mg/L. Some patients have also experienced adverse effects at low plasma concentrations. The dose gradually increases until achieving therapeutic plasma concentrations. This approach reduces side effects.
- **Option C:** Serum theophylline concentrations should be checked after the initiation of therapy, before increasing dose and if any signs or symptoms of toxicity appear. Worsening of the current illness, an occurrence of a new illness or any change in the patient's treatment protocol that may alter theophylline clearance should also prompt the physician to check serum concentrations of theophylline. Attention should also be necessary for the infusion site.
- **Option D:** Use cautiously in patients with a hepatic impairment such as cirrhosis, cholestasis, acute hepatitis because there is an increased risk of severe and potentially fatal complications. This risk exists because clearance decreases by 50% or more in these patients. Frequent monitoring and dose reduction of theophylline are necessary for these patients.

90. The appropriate needle size for insulin injection is:

- A. 18G, 1 ½" long
- B. 22G, 1" long
- C. 22G, 1 ½" long
- D. 25G, 5/8" long

Correct Answer: D. 25G, 5/8" long

A 25G, 5/8" needle is the recommended size for insulin injection because insulin is administered by the subcutaneous route. The board recommends 4-, 5-, and 6-mm needles for all adult patients regardless of their BMI. It is also recommended to insert 4-, 5-, and 6-mm needles at a 90-degree angle and that, if needed, longer needles should be injected with either a skinfold or a 45-degree angle to avoid intramuscular injection of insulin.

- **Option A:** An 18G, 1 ½" needle is usually used for I.M. injections in children, typically in the vastus lateralis. Ensuring the correct delivery of insulin is essential in the treatment of diabetes. Both

proper injection technique and needle length are important considerations for adequate insulin delivery. There have been several studies demonstrating that BMI does not affect efficacy or insulin leakage with shorter pen needles (e.g., 4 or 5 mm vs. 12.7 mm).

- **Option B:** Additionally, the International Scientific Advisory Board for the Third Injection Technique Workshop released recommendations in 2010 on best practices for injection technique for patients with diabetes, which, with regard to needle length, concluded that 4-mm pen needles were efficacious in all patients regardless of BMI.
- **Option C:** A 22G, 1 ½” needle is usually used for adult I.M. injections, which are typically administered in the vastus lateralis or ventrogluteal site. Needle lengths for subcutaneous injections started out as long as 16 mm in 1985, and 12.7-mm needles were introduced in the early 1990s. Over time, with growing evidence of longer needles increasing risks for intramuscular injections and improved technology, shorter needles of 4, 5, 6, and 8 mm have been developed.

91. A male client admitted to the psychiatric unit for treatment of substance abuse says to the nurse, “It felt so wonderful to get high.” Which of the following is the most appropriate response?

- A. “If you continue to talk like that, I’m going to stop speaking to you.”
- B. “You told me you got fired from your last job for missing too many days after taking drugs all night.”
- C. “Tell me more about how it felt to get high.”
- D. “Don’t you know it’s illegal to use drugs?”

Correct Answer: B. “You told me you got fired from your last job for missing too many days after taking drugs all night.”

Confronting the client with the consequences of substance abuse helps to break through denial. Present reality by spending time with the client to facilitate reality orientation because your physical presence is the reality. Be simple, direct, and concise when speaking to the client. Talk with the client about concrete or familiar things; avoid ideological or theoretical discussions. The client’s ability to process abstractions or complexities is impaired.

- **Option A:** Making threats isn’t an effective way to promote self-disclosure or establish a rapport with the client. Motivational counseling works according to the idea that motivation for change is dynamic rather than static. Professionals uses may influence change by developing a therapeutic relationship to increase therapeutic alliance, developing insight, and coping skills to resolve ambivalence, and change health-related behavior.
- **Option C:** Although the nurse should encourage the client to discuss feelings, the discussion should focus on how the client felt before, not during, an episode of substance abuse. Encouraging elaboration about his experience while getting high may reinforce the abusive behavior. Persons may withdraw from their environment with regressive behavior, fail to engage with others, or even notice physical illness and pain. Social exclusion and homelessness may ensue. In the longer term, psychosis and its potential disruption of the capacity to fulfill social roles can result in further burdens.
- **Option D:** The client undoubtedly is aware that drug use is illegal; a reminder to this effect is unlikely to alter behavior. Drug addiction exacerbates social alienation and increases potential for violent lashing out and low self-esteem, along with poor coping skills. Under these circumstances, emotional, social, or symptom-related cues can provoke recourse to available substances and suicidal ideation. They may also contribute to psychosocial instability, self-image issues, and achievement motivation. In some cases, social hostility and rejection may result.

92. Skin reactions are common in radiation therapy. Nursing responsibilities on promoting skin integrity should be promoted apart from:

- A. Avoiding the use of ointments, powders and lotion to the area
- B. Using soft cotton fabrics for clothing
- C. Washing the area with a bar of scented soap and water and patting it dry not rubbing it
- D. Avoiding direct sunshine or cold.

Correct Answer: C. Washing the area with a bar of scented soap and water and patting it dry not rubbing it

- **Option C:** A mild unscented soap should only be used on the skin of the client undergoing radiation to decrease the occurrence of skin reactions.
- **Options A, and B:** Soap and irritants may cause dryness of the patient's skin.
- **Option D:** Since the skin that is receiving radiation therapy may be burned from the treatment, avoiding direct sunlight is helpful to prevent further damage.

93. Which intervention would be included in the care plan for the client with an acute exacerbation of Ménière's disease?

- A. Instructing the client on the correct way to remove impacted cerumen.
- B. Speaking slowly and distinctly in a low-pitched, clear voice without yelling
- C. Providing a safe, quiet, dimly lit environment with enforced bed rest.
- D. Instructing the client to pull the top of the ear and back to instill ear drops.

Correct Answer: C. Providing a safe, quiet, dimly lit environment with enforced bed rest.

Ménière's disease is a chronic disorder of the inner ear involving sensorineural hearing loss, severe vertigo, and tinnitus. Typically, the client experiences sudden episodes of severe whirling vertigo with an inability to stand or walk, buzzing tinnitus that worsens before and during an episode, nausea, vomiting, and diaphoresis. The client's safety must be ensured along with decreasing exposure to extraneous stimuli. This is accompanied by providing the client with a quiet, dimly lit environment and bed rest.

- **Option A:** Instructions about removing cerumen are appropriate for a client with cerumen impaction. When treatment is appropriate, there are three recommended removal methods: cerumenolytic agents, irrigation, and manual removal. To prevent further accumulation of cerumen in patients with recurrent symptoms greater than one per year, patients may apply mineral oil to the external canal 10 to 20 minutes weekly.
- **Option B:** Speaking slowly and distinctly in a low-pitched, clear voice without yelling is appropriate for clients experiencing hearing loss. Clients with Ménière's disease are not deaf during acute exacerbations. However, hearing loss may occur after repeated episodes.
- **Option D:** Ear drops are not the treatment of choice for an acute attack of Ménière's disease. A Cochrane review found low-level evidence to support the use of betahistine with substantial variability between studies. Medical therapy in many medical centers often starts with betahistine orally.

94. The breathing technique that the mother should be instructed to use as the fetus' head is crowning is:

- A. Blowing
- B. Slow chest
- C. Shallow
- D. Accelerated-decelerated

Correct Answer: A. Blowing.

Blowing forcefully through the mouth controls the strong urge to push and allows for a more controlled birth of the head.

- **Option B:** Slow breathing may be started when contractions are intense enough that the woman can no longer walk or talk through them without pausing. Use slow breathing for as long as it is helpful. Switch to another pattern if the woman becomes tense and can no longer relax during contractions.
- **Option C:** Most women feel the need to switch to light breathing at some time during the active phase of labor. Let the intensity of the contractions guide in deciding if and when to use light breathing. Breathe in and out rapidly through the mouth at about one breath per second. Keep breathing shallow and light. Inhalations should be quiet, but exhalation should be clearly audible.
- **Option D:** This is a variation of light breathing. It is sometimes referred to as “pant-pant-blow” or “hee-hee-hoo” breathing. Variable breathing combines light shallow breathing with a periodic longer or more pronounced exhalation. Variable breathing is used in the first stage if the woman feels overwhelmed, unable to relax, in despair, or exhausted.

95. A client's ABG analysis reveals a pH of 7.18, PaCO₂ of 72 mm Hg, PaO₂ of 77 mm Hg, and HCO₃⁻ of 24 mEq/L. What do these values indicate?

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

Correct Answer: D. Respiratory acidosis

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. To compensate for the disturbance in the balance between carbon dioxide and bicarbonate (HCO₃⁻), the kidneys begin to excrete more acid in the forms of hydrogen and ammonium and reabsorb more base in the form of bicarbonate. This compensation helps to normalize the pH.

- **Option A:** Metabolic acidosis is characterized by an increase in the hydrogen ion concentration in the systemic circulation resulting in a serum HCO₃ less than 24 mEq/L. Blood pH distinguishes between acidemia (pH less than 7.35) and alkalemia (pH greater than 7.45). Metabolic acidosis is due to alterations in bicarbonate, so the pCO₂ is less than 40 since it is not the cause of the primary acid-base disturbance. In metabolic acidosis, the distinguishing lab value is a decreased

bicarbonate (normal range 21 to 28 mEq/L).

- **Option B:** A decrease in pH below this range is acidosis, an increase above this range is alkalosis. Respiratory alkalosis is by definition a disease state where the body's pH is elevated to greater than 7.45 secondary to some respiratory or pulmonary process.
- **Option C:** 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.

96. The home care nurse is visiting an older female client whose husband died six (6) months ago. Which behavior, by the client, indicates ineffective coping?

- A. Visiting her husband's grave once a month
- B. Participating in a senior citizens program
- C. Looking at old snapshots of her family
- D. Neglecting her personal grooming

Correct Answer: D. Neglecting her personal grooming.

Coping mechanisms are behaviors used to decrease stress and anxiety. In response to a death, ineffective coping is manifested by an extreme behavior that in some instances may be harmful to the individual physically or psychologically. Neglecting personal grooming is indicative of behavior that identifies an ineffective coping behavior in the grieving process.

- **Option A:** This is an effective way to help the client cope and express their feelings when grieving. Acknowledge the patient's need to review the loss experience. In this way, the patient and family members integrate the event into their experience.
- **Option B:** A senior citizen program provides activities and enrichment classes that can help the widow alleviate feelings of helplessness, loneliness, and boredom after a loss of a loved one.
- **Option C:** Strengthen the patient's efforts to go on with his or her life and normal routine. Review and point out strengths and progress to date. Encourage the patient to manage their own self-care needs for rest, sleep, nutrition, and leisure activities.

97. A patient is taking insulin glargine injection daily. The nurse instructed the client that the onset of action will likely happen?

- A. 2-4 hours after administration
- B. 4-12 hours after administration
- C. 6-12 hours after administration
- D. 18-24 hours after administration

Correct Answer: A. 2-4 hours after administration

Insulin glargine is a long-acting insulin with an onset of 2-4 hours, no peak, and its duration of action is 24 hours.

98. Jake has psoriasis of the scalp. The physician has ordered Zetar shampoo. You would advise the client to:

- A. Avoid sun exposure to the scalp.
- B. Use the shampoo PRN.
- C. Report pruritus.
- D. None of the above.

Correct Answer: A. Avoid sun exposure to the scalp.

One of the side effects of Zetar shampoo is photosensitivity. This medication makes a person more sensitive to the sun. Be sure to completely wash off the medication before going out into the sun. Avoid sun exposure, tanning booths, and sunlamps for at least 24 hours after using this medication unless the doctor directs otherwise. Other medications may also increase sun sensitivity.

- **Option B:** Use this product usually twice a week or as directed by the doctor. Dosage is based on the medical condition, the product type/brand, and response to treatment. Do not use large amounts of this medication, use it more often, or use it for a longer period than directed. The condition will not clear faster, but the chance for side effects may be increased.
- **Option C:** Skin/scalp irritation or staining of skin/hair (especially in patients with blonde, bleached, dyed, or gray hair) may occur. If skin irritation develops or worsens, stop using this product and tell the doctor or pharmacist promptly.
- **Option D:** This medication is used on the hair/scalp to treat dandruff and other scaly, itchy skin conditions (psoriasis or seborrheic dermatitis). Coal tar belongs to a class of drugs known as keratoplastics. It works by causing the skin to shed dead cells from its top layer and slow down the growth of skin cells. This effect decreases scaling and dryness. Coal tar can also decrease itchiness from these skin conditions.

99. Which neonatal behavior is most commonly associated with fetal alcohol syndrome (FAS)?

- A. Hypoactivity
- B. High birth weight
- C. Poor wake and sleep patterns
- D. High threshold of stimulation

Correct Answer: C. Poor wake and sleep patterns.

- **Option C:** Altered sleep patterns are caused by disturbances in the CNS from alcohol exposure in utero.
- **Option A:** Hyperactivity is a characteristic generally noted.
- **Option B:** Low birth weight is a physical defect seen in neonates with FAS.
- **Option D:** Neonates with FAS generally have a low threshold for stimulation.

100. Nurse Barry is performing Leopold's maneuver and found the following: breech presentation, fetal back at the right side of the mother. Based on these

findings, the nurse can hear the fetal heartbeat (PMI) best in which location?

- A. Left lower quadrant
- B. Right lower quadrant
- C. Left upper quadrant
- D. Right upper quadrant

Correct Answer: B. Right lower quadrant

Right lower quadrant. The landmark to look for when looking for PMI is the location of the fetal back in relation to the right or left side of the mother and the presentation, whether cephalic or breech. The best site is the fetal back nearest the head.

- **Option A:** The fetal limbs may be palpated at the left lower quadrant.
- **Option C:** The fetal head may be facing the direction of the left upper quadrant.
- **Option D:** The right upper quadrant has the fetal back, but it is nearer to the lower extremities of the fetus.