

Kevin's Review - 85 NCLEX Practice Questions

1. When planning home care for a client with hepatitis A, which preventive measure should be emphasized to protect the client's family?

- A. Keeping the client in complete isolation
- B. Using good sanitation with dishes and shared bathrooms
- C. Avoiding contact with blood-soiled clothing or dressing
- D. Forbidding the sharing of needles or syringes

Correct Answer: B. Using good sanitation with dishes and shared bathrooms.

Hepatitis A is transmitted through the fecal-oral route or from contaminated water or food. Measures to protect the family include good handwashing, personal hygiene and sanitation, and the use of standard precautions. According to the WHO, the most effective way to prevent HAV infection is to improve sanitation, food safety, and immunization practices.

- **Option A:** Complete isolation is not required. No specific treatment is needed for most patients with acute, uncomplicated HAV infection beyond supportive care. Complete recovery from symptoms may take several weeks to months.
- **Option C:** HAV is most commonly transmitted through the oral-fecal route via exposure to contaminated food, water, or close physical contact with an infectious person. According to the World Health Organization (WHO), infection rates in developed countries are low.
- **Option D:** Avoiding the sharing of needles or syringes are precautions needed to prevent transmission of hepatitis B. Globally, the rates of HAV have decreased due to improvements in public healthcare policies, sanitation, and education, but infection rates of other hepatitis viruses appear to be increasing.

2. A nurse who explains that a client's psychotic behavior is unconsciously motivated understands that the client's disordered behavior arises from which of the following?

- A. Abnormal thinking
- B. Altered neurotransmitters
- C. Internal needs
- D. Response to stimuli

Correct Answer: C. Internal needs

The concept that behavior is motivated and has meaning comes from the psychodynamic framework. According to this perspective, behavior arises from internal wishes or needs. Much of what motivates behavior comes from the unconscious. The psychodynamic approach includes all the theories in psychology that see human functioning based upon the interaction of drives and forces within the person, particularly unconscious, and between the different structures of the personality.

- **Option A:** According to Freud (1915), the unconscious mind is the primary source of human behavior. Like an iceberg, the most important part of the mind is the part you cannot see. Our feelings, motives, and decisions are actually powerfully influenced by our past experiences and stored in the unconscious.
- **Option B:** Psychodynamic theory states that events in our childhood have a great influence on our adult lives, shaping our personality. Events that occur in childhood can remain in the unconscious,

and cause problems as adults. Personality is shaped as the drives are modified by different conflicts at different times in childhood (during psychosexual development).

- **Option D:** The remaining responses do not address the internal forces thought to motivate behavior. Psychodynamic theory is strongly determinist as it views our behavior as caused entirely by unconscious factors over which we have no control. Unconscious thoughts and feelings can transfer to the conscious mind in the form of parapraxes, popularly known as Freudian slips or slips of the tongue. We reveal what is really on our minds by saying something we didn't mean to.

3. A 58-year-old male patient with a 10-year history of rheumatoid arthritis (RA) is admitted to the rheumatology unit of a tertiary care hospital. He is currently experiencing an exacerbation of his symptoms, with notable severe joint pain in his hands, knees, and elbows. The patient has been on a regimen of nonsteroidal anti-inflammatory drugs (NSAIDs) for pain relief and is now being introduced to a new medication by his rheumatologist. Intrigued and somewhat overwhelmed, he inquires of the attending nurse, "Why do I need to take disease-modifying antirheumatic drugs (DMARDs) if I already take pain medications?" Which is the best response by the nurse?

- A. "Pain medications only provide temporary relief, but DMARDs can slow down the progression of rheumatoid arthritis."
- B. "DMARDs are more effective in managing joint pain compared to pain medications alone."
- C. "DMARDs are necessary to prevent the development of osteoporosis, which can worsen joint pain."
- D. "Taking DMARDs can help reduce the frequency and severity of flare-ups, leading to less joint pain overall."

Correct Answer: A. "Pain medications only provide temporary relief, but DMARDs can slow down the progression of rheumatoid arthritis."

This statement is correct. While NSAIDs and other pain medications target the symptoms (in this case, pain) of rheumatoid arthritis, DMARDs specifically target the underlying processes that drive the disease. By modifying the disease course, DMARDs have the potential to slow down or even halt the progression of RA, potentially preventing joint damage and disability.

- **Option B:** This is misleading. DMARDs are primarily used to slow or stop the disease progression, not specifically for pain management. While DMARDs might reduce symptoms as the disease is controlled, pain medications are specifically formulated to manage pain. Therefore, while DMARDs might have an indirect effect on pain by controlling disease activity, they are not primarily analgesics.
- **Option C:** While RA is a risk factor for osteoporosis, DMARDs are not primarily prescribed for osteoporosis prevention. There are other medications and strategies specifically for the prevention and treatment of osteoporosis in RA patients. This statement can be misleading in the context of the question.
- **Option D:** This statement is also correct. By controlling the underlying disease process, DMARDs can decrease the frequency and severity of RA flare-ups. As flare-ups are associated with increased symptoms, including pain, reducing these flare-ups indirectly leads to reduced pain. However, it should be noted that the primary purpose of DMARDs isn't pain management but disease control.

4. When interpreting an ECG, the nurse would keep in mind which of the following about the P wave? Select all that apply.

- A. Reflects electrical impulse beginning at the SA node
- B. Indicated electrical impulse beginning at the AV node
- C. Reflects atrial muscle depolarization
- D. Identifies ventricular muscle depolarization
- E. Has duration of normally 0.11 seconds or less

Correct Answer: A, C, & E.

The P wave and PR segment is an integral part of an electrocardiogram (ECG). It represents the electrical depolarization of the atria of the heart. It is typically a small positive deflection from the isoelectric baseline that occurs just before the QRS complex.

- **Options A and B:** In a client who has had an ECG, the P wave represents the activation of the electrical impulse in the SA node, which is then transmitted to the AV node. The P wave represents the electrical depolarization of the atria. In a healthy person, this originates at the sinoatrial node (SA node) and disperses into both left and right atria.
- **Options C and D:** In addition, the P wave represents atrial muscle depolarization, not ventricular depolarization. Depolarization of the right atrium is responsible for the early part of the P wave, and depolarization of the left atrium is responsible for the middle and terminal portions of the P wave.
- **Option E:** The normal duration of the P wave is 0.11 seconds or less in duration and 2.5 mm or more in height. In a normal EKG, the P-wave precedes the QRS complex. It looks like a small bump upwards from the baseline. The amplitude is normally 0.05 to 0.25mV (0.5 to 2.5 small boxes). Normal duration is 0.06-0.11 seconds (1.5 to 2.75 small boxes).

5. Nurse Rica is teaching a client and her family about the causes of depression. Which of the following causative factors should the nurse emphasize as the most significant?

- A. Brain structure abnormalities
- B. Chemical imbalance
- C. Social environment
- D. Recessive gene transmission

Correct Answer: B. Chemical imbalance

Chemical imbalance of neurotransmitters in the brain is the most significant factor in depression. However, the exact cause has not been established, so other factors may also be involved. The underlying pathophysiology of major depressive disorder has not been clearly defined. Current evidence points to a complex interaction between neurotransmitter availability and receptor regulation and sensitivity underlying the affective symptoms.

- **Option A:** Vascular lesions may contribute to depression by disrupting the neural networks involved in emotion regulation—in particular, frontostriatal pathways that link the dorsolateral prefrontal cortex, orbitofrontal cortex, anterior cingulate, and dorsal cingulate. Other components of limbic circuitry, in particular, the hippocampus and amygdala, have been implicated in depression.

- **Option C:** A person's social environment, including lack of support systems, may also increase the risk of depression. The etiology of major depressive disorder is multifactorial with both genetic and environmental factors playing a role. First-degree relatives of depressed individuals are about 3 times as likely to develop depression as the general population; however, depression can occur in people without family histories of depression.
- **Option D:** Although genetic transmission certainly may be a factor, no definite pattern of transmission has been identified. Some evidence suggests that genetic factors play a lesser role in late-onset depression than in early-onset depression. There are potential biological risk factors that have been identified for depression in the elderly.

6. While working in the pediatric oncology ward, Nurse Ramirez manages care for Leo, a 4-year-old boy newly diagnosed with rhabdomyosarcoma. Leo's parents are anxious, as they've been reading extensively online and are overwhelmed with information. They express concerns about potential metastasis and how the cancer may affect Leo's overall function. Given the primary site of rhabdomyosarcoma, Nurse Ramirez should emphasize monitoring the function of which area of the body and educate the family about its relevance.

- A. All striated muscles
- B. The cerebellum
- C. The kidneys
- D. The leg bones

Correct Answer: A. All striated muscles

Rhabdomyosarcoma is the most common children's soft tissue sarcoma. It originates in striated (skeletal) muscles and can be found anywhere in the body. Symptoms of rhabdomyosarcoma include if the cancer is in the head or neck area, sudden bulging or swelling of the eyes, conjunctival chemosis, and headache. It can also affect the urinary or reproductive system. Its common site of metastasis is the lung. Leo's muscle strength, function, and any pain in areas of striated muscles should be continuously assessed. Educating the family about the origin of this cancer can help them understand the primary areas of concern.

- **Option B:** The cerebellum is not affected in rhabdomyosarcoma.
- **Option C:** The kidneys are not directly affected by the disease.
- **Option D:** Bones are not directly affected by the disease.

7. A nurse is reviewing the record of a client in the labor room and notes that the nurse-midwife has documented that the fetus is at (-1) station. The nurse determines that the fetal presenting part is:

- A. 1 cm above the ischial spine
- B. 1 fingerbreadth below the symphysis pubis
- C. 1 inch below the coccyx
- D. 1 inch below the iliac crest

Correct Answer: A. 1 cm above the ischial spine

Station is the relationship of the presenting part to an imaginary line drawn between the ischial spines, is measured in centimeters, and is noted as a negative number above the line and a positive number below the line. At -1 station, the fetal presenting part is 1 cm above the ischial spines.

- **Option B:** The doctor will assign a number from -5 to +5 to describe where the baby is in relation to the ischial spines. The ischial spines are bony protrusions located in the narrowest part of the pelvis. During a vaginal exam, the doctor will feel for the baby's head. If the head is high and not yet engaged in the birth canal, it may float away from their fingers.
- **Option C:** When the baby's head is level with the ischial spines, the fetal station is zero. Once the baby's head fills the vaginal opening, just before birth, the fetal station is +5.
- **Option D:** Usually about two weeks before delivery, the baby will drop into the birth canal. This is called being "engaged." At this point, the baby is at station 0. This drop into the birth canal is called a lightening.

8. A client had undergone radiation therapy (external). The expected side effects include the following apart from:

- A. Hair loss
- B. Ulceration of oral mucous membranes
- C. Constipation
- D. Headache

Correct Answer: C. Constipation

- **Option C:** Diarrhea, not constipation is the side effect of radiation therapy which usually starts during or right after the treatment and may last for several weeks.
- **Options A, B, and D:** These are common side effects of radiation therapy.

9. Annabelle is being discharged with a colostomy, and you're teaching her about colostomy care. Which statement correctly describes a healthy stoma?

- A. "At first, the stoma may bleed slightly when touched."
- B. "The stoma should appear dark and have a bluish hue."
- C. "A burning sensation under the stoma faceplate is normal."
- D. "The stoma should remain swollen away from the abdomen."

Correct Answer: A. "At first, the stoma may bleed slightly when touched."

For the first few days to a week, slight bleeding normally occurs when the stoma is touched because the surgical site is still new. She should report profuse bleeding immediately. A small amount of blood from the stoma itself is not unusual while it is healing.

- **Option B:** A stoma should be a beefy red or pink color. The tissue that makes a stoma is the lining of the intestine and should be moist and shiny. It is very similar in appearance to the inside of the mouth along your cheek.

- **Option C:** The skin may be tender initially during the healing process and may feel irritated by normal cleaning. The skin immediately surrounding the stoma and stoma can be irritated by the cleaning process.
- **Option D:** A normal stoma in the days after surgery may be swollen and may also produce mucus. While the stoma itself should be moist, the skin around the stoma should be normal in appearance.

10. Which of the following factors is believed to be linked to Crohn's disease?

- A. Constipation
- B. Diet
- C. Hereditary
- D. Lack of exercise

Correct Answer: C. Hereditary

Although the definite cause of Crohn's disease is unknown, it's thought to be associated with infectious, immune, or psychological factors. Because it has a higher incidence in siblings, it may have a genetic cause. More than a hundred genes associated with IBD have been identified. In Crohn's disease particularly, there appears to be a genetic association with phenotypes. Specifically, NOD2/CARD15 mutations were found to be associated with a phenotype of Crohn's disease which was associated in those diagnosed at a younger age

- **Option A:** Constipation does not cause Crohn's disease. Although the exact etiology of inflammatory bowel disease (IBD) is not known, there is substantial evidence to suggest that the disease is resulting from an inappropriate immune response in the bowel to situations from environmental factors such as drugs, toxins, infections or intestinal microbes in a genetically susceptible host.
- **Option B:** Diet is not a cause of Crohn's disease. In the future, genotyping could potentially provide prognostic information on the severity of the disease. Furthermore, it could predict which patients should be considered for surgical management vs. medical management based on a more detailed understanding of genetic analysis.
- **Option D:** Lack of exercise does not cause Crohn's disease. This condition results from a combination of genetic, environmental, and lifestyle factors, many of which are unknown. Many of the major genes related to Crohn's disease, including NOD2, ATG16L1, IL23R, and IRGM, are involved in immune system function.

11. For a morbidly obese patient, which intervention should the nurse choose to counteract the pressure created by the skin folds?

- A. Cover the mattress with a sheepskin.
- B. Keep the linens wrinkle free.
- C. Separate the skin folds with towels.
- D. Apply petrolatum barrier creams.

Correct Answer: C. Separate the skin folds with towels.

Separating the skin folds with towels relieves the pressure of skin rubbing on skin. Skin folds, in particular, may be difficult for the patient to clean thoroughly; the abdominal folds and groins may be

ignored, leading to an increased risk of skin breakdown in these areas.

- **Option A:** Sheepskins are not recommended for use at all. Skin folds present a challenge in the management of patients who are morbidly obese. The weight from excess adipose tissue in skinfold areas can have an increased risk of skin injury such as friction, maceration, skin tears and pressure ulcer development.
- **Option B:** Skin folds and areas vulnerable to skin injury should be cleaned and dried several times a day. Alcohol-based lotions and harsh soaps, as well as talcum powders, should be avoided in these areas. If necessary, dry cloths to absorb moisture can be left in skin folds in between washing and drying of the skin folds.
- **Option D:** Petrolatum barrier creams are used to minimize moisture caused by incontinence. Patient hydration should also be considered in the nutrition plan for the patients and the health of their skin.

12. Which method would a nurse use to determine a client's potential risk for suicide?

- A. Wait for the client to bring up the subject of suicide.
- B. Observe the client's behavior for cues of suicide ideation.
- C. Question the client directly about suicidal thoughts.
- D. Question the client about future plans.

Correct Answer: C. Question the client directly about suicidal thoughts.

Directly questioning a client about suicide is important to determine suicide risk. A host of thoughts and behaviors are associated with self-destructive acts. Although many assume that people who talk about suicide will not follow through with it, the opposite is true; a threat of suicide can lead to the completed act, and suicidal ideation is highly correlated with suicidal behaviors. A clear and complete evaluation and clinical interview provide the information upon which to base a suicide intervention. Although risk factors offer major indications of the suicide danger, nothing can substitute for a focused patient inquiry. However, although all the answers a patient gives may be inclusive, a therapist often develops a visceral sense that his or her patient is going to commit suicide. The clinician's reaction counts and should be considered in the intervention.

- **Option A:** The client may not bring up this subject for several reasons, including guilt regarding suicide, wishing not to be discovered, and his lack of trust in staff. 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.
- **Option B:** Behavioral cues are important, but direct questioning is essential to determine suicide risk. If suicidal ideation is present, the next question must be about any plans for suicidal acts. The general formula is that more specific plans indicate greater danger. Although vague threats, such as a threat to commit suicide sometime in the future, are the reason for concern, responses indicating that the person has purchased a gun, has ammunition, has made out a will, and plans to use the gun are more dangerous. The plan demands further questions. If the person envisions a gun-related death, determine whether he or she has the weapon or access to it.
- **Option D:** Indirect questions convey to the client that the nurse is not comfortable with the subject of suicide and, therefore, the client may be reluctant to discuss the topic. Determine what the patient believes his or her suicide would achieve. This suggests how seriously the person has been

considering suicide and the reason for death. For example, some believe that their suicide would provide a way for family or friends to realize their emotional distress. Others see their death as a relief from their own psychic pain. Still others believe that their death would provide a heavenly reunion with a departed loved one. In any scenario, the clinician has another gauge of the seriousness of the planning.

13. Breast self-examination is best done by the woman on herself every month during

- A. The middle of her cycle to ensure that she is ovulating.
- B. During the menstrual period.
- C. Right after the menstrual period so that the breast is not being affected by the increase in hormones particularly estrogen.
- D. Just before the menstrual period to determine if ovulation has occurred.

Correct Answer: C. Right after the menstrual period so that the breast is not being affected by the increase in hormones particularly estrogen.

The best time to do self-breast examination is right after the menstrual period is over so that the hormonal level is low thus the breasts are not tender.

- **Option A:** The best time to examine the breasts is usually 1 week after the menstrual period starts, when the breasts are least likely to be swollen or tender. Examining the breasts at other times in the menstrual cycle may make it hard to compare results of one exam with another.
- **Option B:** The hormone levels fluctuate each month during the menstrual cycle, which causes changes in breast tissue. Swelling begins to decrease when the woman's period starts. The best time to perform a self-exam for breast awareness is usually the week after the period ends.
- **Option D:** The best time to do a monthly self-breast exam is about 3 to 5 days after the woman's period starts. Do it at the same time every month. The breasts are not as tender or lumpy at this time in the monthly cycle. If the woman has gone through menopause, she should do the exam on the same day every month.

14. Situation: A 35-year-old male has an intense fear of riding an elevator. He claims "As if I will die inside." This has affected his studies The client is suffering from:

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

Correct Answer: C. Claustrophobia

Claustrophobia is fear of closed space. Claustrophobia is a type of specific phobia, where one has a fear of closed spaces. Examples of closed spaces are engine rooms, MRI machines, elevators, etc. Those with specific phobias generally will report avoidance behaviors regarding the particular object or situation that triggers their fear. The fear can be expressed as a danger of harm, disgust, or experience of the physical symptoms in a phobic scenario.

- **Option A:** Agoraphobia is fear of open space or being in a situation where escape is difficult. Agoraphobia is the anxiety that occurs when one is in a public or crowded place, from which a potential escape is difficult, or help may not be readily available. It is characterized by the fear that a panic attack or panic-like symptoms may occur in these situations. Individuals with agoraphobia, therefore, strive to avoid such situations or locations.
- **Option B:** Social phobia is fear of performing in the presence of others in a way that will be humiliating or embarrassing. Social anxiety disorder (SAD) is characterized by excessive fear of embarrassment, humiliation, or rejection when exposed to possible negative evaluation by others when engaged in a public performance or social interactions. It is also known as social phobia. With the publication of DSM-5, the diagnostic criteria for SAD have been broadened from previous editions to include fear of acting in a way or show anxiety symptoms that offend others or lead to rejection in addition to fear of humiliation or embarrassment. Additionally, the latest edition of DSM removed the generalized subtype and added the “performance only” specifier.
- **Option D:** Xenophobia is fear of strangers. Xenophobia, or fear of strangers, is a broad term that may be applied to any fear of someone who is different from us. Hostility towards outsiders is often a reaction to fear. It typically involves the belief that there is a conflict between an individual’s ingroup and an outgroup. Xenophobia often overlaps with forms of prejudice including racism and homophobia, but there are important distinctions. Where racism, homophobia, and other forms of discrimination are based on specific characteristics, xenophobia is usually rooted in the perception that members of the outgroup are foreign to the ingroup community.

15. Nurse Marie is caring for a 32-year-old client admitted with pernicious anemia. Which set of findings should the nurse expect when assessing the client?

- A. Pallor, bradycardia, and reduced pulse pressure
- B. Pallor, tachycardia, and a sore tongue
- C. Sore tongue, dyspnea, and weight gain
- D. Angina, double vision, and anorexia

Correct Answer: B. Pallor, tachycardia, and a sore tongue

Pallor, tachycardia, and a sore tongue are all characteristic findings in pernicious anemia. Other clinical manifestations include anorexia; weight loss; a smooth, beefy red tongue; a wide pulse pressure; palpitations; angina; weakness; fatigue; and paresthesia of the hands and feet.

- **Option A:** Tachycardia, instead of bradycardia, and reduced pulse pressure are present in a client with pernicious anemia. The heart may start to beat faster to make up for the reduced number of red blood cells in the body.
- **Option C:** Weight loss, instead of weight gain, is a common symptom of pernicious anemia. A B12 deficiency can be counteracted with a dose of the vitamin, causing energy levels to regulate and the metabolism to work harder to burn up fuel. The result is weight loss when the deficiency is mitigated, but adding B12 to a body with sufficient levels doesn’t really increase natural effects.
- **Option D:** Double vision isn’t a characteristic finding in pernicious anemia. However, vision loss associated with vitamin B12 deficiency can occur even in well-nourished individuals who can’t absorb enough B12 to support healthy vision.

16. The nurse is assigned to care for the client with a Steinmann pin. During pin care, she notes that the LPN uses sterile gloves and Q-tips to clean the pin. Which action should the nurse take at this time?

- A. Assisting the LPN with opening sterile packages and peroxide.
- B. Telling the LPN that clean gloves are allowed.
- C. Telling the LPN that the registered nurse should perform pin care.
- D. Asking the LPN to clean the weights and pulleys with peroxide.

Correct Answer: A. Assisting the LPN with opening sterile packages and peroxide

The nurse is performing the pin care correctly when she uses sterile gloves and Q-tips. All pins and wire sites must be cleaned daily. Basic pin care will be performed once daily by the hospital nursing staff prior to discharge from the hospital. Following discharge, the patient and family will go to the clinic for pin care teaching and instructions.

- **Option B:** During pin care, the sterile technique is utilized and sterile gloves are needed. The approach to pin care should occur in a stepwise fashion. If step one is effective there is no need to go further and pins can be wrapped with gauze. If step one is not effective, please continue until effective pin care has been achieved.
- **Option C:** A licensed practical nurse can perform pin care. Pin care is recommended during showers, after pool therapy, or swimming in the pool or ocean (ocean saltwater is good for pin sites). Ideally, pin sites are cleaned when the surrounding skin and gauze are soft. This should make removal of gauze and cleaning of pins less painful.
- **Option D:** There is no need to clean the weights. The purpose of the cleaning is to prevent the skin from attaching to the pins and wires and to clean and inspect the area to decrease the chance of infection.

17. Which example of a therapeutic communication technique would be effective in the planning phase of the nursing process?

- A. "We've discussed past coping skills. Let's see if these coping skills can be effective now."
- B. "Please tell me in your own words what brought you to the hospital."
- C. "This new approach worked for you. Keep it up."
- D. "I notice that you seem to be responding to voices that I do not hear."

Correct Answer: A. "We've discussed past coping skills. Let's see if these coping skills can be effective now."

This is an example of the therapeutic communication technique of formulating a plan of action. By the use of this technique, the nurse can help the client plan in advance to deal with a stressful situation which may prevent anger and/or anxiety from escalating to an unmanageable level.

- **Option B:** Asking this question should be done at the assessment phase of the nursing process. Encouraging the description of perceptions is a therapeutic technique that allows the nurse to see things from the client's perspective. Encouraging the client to describe fully may relieve the tension the client is feeling.
- **Option C:** Acknowledging that the approach is working occurs in the evaluation phase of the nursing process. Noting the efforts that the client has made shows that the nurse recognizes the

client as an individual. Such recognition does not carry the notion of value, that is, of being “good” or “bad”.

- **Option D:** Making observations or verbalizing what the nurse perceives may occur in the assessment phase. Sometimes clients cannot verbalize or make themselves understood. Or the client may not be ready to talk.

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

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

Correct Answer: D. Seizure.

Correct Answer: D. Seizure.

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

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

19. A client’s physician orders nuclear cardiography and makes an appointment for a thallium scan. The purpose of injecting radioisotope into the bloodstream is to detect:

- A. Normal vs. abnormal tissue
- B. Damage in areas of the heart
- C. Ventricular function
- D. Myocardial scarring and perfusion

Correct Answer: D. Myocardial scarring and perfusion

This scan detects myocardial damage and perfusion, an acute or chronic MI. These scans are often done to determine the size and location of injured muscle after a heart attack and will help the doctor find out more about the heart’s cells and its blood supply. A thallium (or radiolite) scan uses a radioactive tracer to see how much blood is reaching different parts of the heart.

- **Option A:** An echocardiogram is a noninvasive (the skin is not pierced) procedure used to assess the heart’s function and structures. During the procedure, a transducer (like a microphone) sends out sound waves at a frequency too high to be heard. When the transducer is placed on the chest at certain locations and angles, the sound waves move through the skin and other body tissues to the heart tissues, where the waves bounce or “echo” off of the heart structures. These sound waves are sent to a computer that can create moving images of the heart walls and valves.
- **Option B:** Electrocardiogram (ECG) records the electrical activity of the heart, shows abnormal rhythms (arrhythmias), and can sometimes detect heart muscle damage. The evolution of EKG

from a string galvanometer to the modern-day advanced computerized machine has led to its use as a diagnostic and screening tool, making it the gold standard for diagnosing various cardiac diseases.

- **Option C:** Specific ventricular function is tested by a gated cardiac blood pool scan. A cardiac blood pool test sometimes referred to as a wall motion study, multi-gated acquisition, or MUGA scan is a nuclear medicine test used to assess the heart's pumping function. The MUGA is most often used to measure the function of the left ventricle (LV), which is the major pumping chamber of the heart.

20. The nurse is teaching a female client with a leg ulcer about tissue repair and wound healing. Which of the following statements by the client indicates effective teaching?

- A. "I'll limit my intake of protein."
- B. "I'll make sure that the bandage is wrapped tightly."
- C. "My foot should feel cold."
- D. "I'll eat plenty of fruits and vegetables."

Correct Answer: D. "I'll eat plenty of fruits and vegetables."

For effective tissue healing, adequate intake of protein, vitamin A, B complex, C, D, E, and K are needed. Therefore, the client should eat a high protein diet with plenty of fruits and vegetables to provide these nutrients.

- **Option A:** The wound healing process further exacerbates protein loss, therefore during recovery, a high protein diet helps the body in repairing damaged tissues.
- **Option B:** The bandage should be secure but not too tight to impede circulation to the area (needed for tissue repair).
- **Option C:** If the client's foot feels cold, circulation is impaired, thus inhibiting wound healing.

21. On the first postpartum (PP) night, a client requests that her baby be sent back to the nursery so she can get some sleep. The client is most likely in which of the following phases?

- A. Depression phase
- B. Letting-go phase
- C. Taking-hold phase
- D. Taking-in phase

Correct Answer: D. Taking-in phase

The taking-in phase occurs in the first 24 hours after birth. The mother is concerned with her own needs and requires support from staff and relatives. The woman becomes dependent on her healthcare provider or support person with some of the daily tasks and decision-making. The woman prefers to talk about her experiences during labor and birth and also her pregnancy. Encouraging the woman to talk about her experiences during labor and birth would greatly help her adjust and let her incorporate it into her new life.

- **Option A:** Depression is not one of the phases of postpartum psychological changes. The changes that the woman undergoes are crucial within the first 24 hours of postpartum, especially the psychological changes. These changes might affect the woman permanently if not given the appropriate attention and care.
- **Option B:** The letting-go phase begins several weeks later when the mother incorporates the new infant into the family unit. During the letting go phase, the woman finally accepts her new role and gives up her old roles like being a childless woman or just a mother of one child. Readjustment of relationships is needed for an easy transition to this phase.
- **Option C:** The taking-hold phase occurs when the mother is ready to take responsibility for her care as well as the infant's care. The taking hold phase starts 2 to 4 days after delivery. The woman starts to initiate actions on her own and makes decisions without relying on others. She starts to focus on the newborn instead of herself and begins to actively participate in newborn care.

22. Dr. Hugo has prescribed sulfonylureas for Rebecca in the management of diabetes mellitus type 2. As a nurse, you know that the primary purpose of sulfonylureas, such as long-acting glyburide (Micronase), is to:

- A. Induce hypoglycemia by decreasing insulin sensitivity.
- B. Improve insulin sensitivity and decrease hyperglycemia.
- C. Stimulate the beta cells of the pancreas to secrete insulin.
- D. Decrease insulin sensitivity by enhancing glucose uptake.

Correct Answer: C. Stimulate the beta cells of the pancreas to secrete insulin.

Sulfonylureas such as glyburide are used only with patients who have some remaining pancreatic-beta cell function. These drugs stimulate insulin secretion, which reduces liver glucose output and increases cell uptake of glucose, enhancing the number of and sensitivity of cell receptor sites for interaction with insulin.

- **Option A:** Medications that reduce insulin resistance (insulin-sensitizing and antihyperglycemic effects) include metformin and thiazolidinediones. Metformin is a biguanide; it reduces hepatic glucose output and increases the uptake in the peripheral tissues (muscle and adipocytes).
- **Option B:** Thiazolidinediones (TZDs) are insulin sensitizers that act on intracellular metabolic pathways to enhance insulin action and increase insulin sensitivity in critical tissues. TZDs also increases adiponectin levels, decrease hepatic gluconeogenesis, and increase insulin-dependent glucose uptake in muscle and fat. Adiponectin, a cytokine secreted by fat tissue, increases insulin sensitivity, and fatty acid oxidation increases with TZD therapy.
- **Option D:** Metformin exerts its glucose-lowering effect by suppressing gluconeogenesis in the liver and facilitating glucose uptake and use by peripheral tissues. Decreased glucose uptake may result from suppressed insulin signaling or impaired glucose transporter (GLUT) 4 trafficking.

23. A client going through intense chemotherapy treatment is admitted to the unit. Which of these would the nurse instruct the nursing assistant to report to prevent an acid-base imbalance?

- A. Hair loss during the morning bath.
- B. Complaints of pain associated with exertion.

- C. Failure to eat all the food on the breakfast tray.
- D. Prolonged episodes of nausea and vomiting.

Correct Answer: D. Prolonged episodes of nausea and vomiting.

Repeated nausea and vomiting can lead to an acid base deficit and metabolic alkalosis. Other causes of metabolic alkalosis include the loss of hydrochloric acid from the stomach through vomiting, potassium depletion due to the use of diuretics for hypertension, and the excessive use of laxatives.

- **Option A:** Chemotherapy drugs are powerful medications that attack rapidly growing cancer cells. Unfortunately, these drugs also attack other rapidly growing cells in the body — including those in the hair roots. Fortunately, most of the time hair loss from chemotherapy is temporary.
- **Option B:** Chemotherapy or radiation induced pain is most often a form of nerve pain. It can cause peripheral neuropathy (painful numbness of the extremities), or paresthesia (numbness and tingling of hands, feet or any extremity of the body).
- **Option C:** Cancer treatments may lower appetite or change the way food tastes or smells. Side effects such as mouth and throat problems, or nausea and vomiting can also make eating difficult. Cancer-related fatigue can also lower the appetite.

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

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

Correct Answer: D. Hyperuricemia.

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

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

25. Stephanie delegates effectively if she has authority to act, which is best defined as:

- A. Having a responsibility to direct others.
- B. Being accountable to the organization.
- C. Having a legitimate right to act.
- D. Telling others what to do.

Correct Answer: C. Having legitimate right to act.

Authority is a legitimate or official right to give the command. This is an officially sanctioned responsibility. Managers must possess the authority to give orders, and recognize that with authority comes responsibility. As well as rank, Fayol argues that a manager's intelligence, experience, and

values should command respect.

- **Option A:** In order to get things done in an organization, management has the authority to give orders to the employees. Of course with this authority comes responsibility. According to Henri Fayol, the accompanying power or authority gives the management the right to give orders to the subordinates.
- **Option B:** The responsibility can be traced back from performance and it is, therefore, necessary to make agreements about this. In other words, authority and responsibility go together and they are two sides of the same coin.
- **Option D:** The right to give orders should not be considered without reference to responsibility. If the authority is more than responsibility then chances are that a manager may misuse it. If responsibility is more than authority then he may feel frustrated.

26. A young, handsome man with a diagnosis of antisocial personality disorder is being discharged from the hospital next week. He asks the nurse for her phone number so that he can call her for a date. The nurse's best response would be:

- A. "We are not permitted to date clients."
- B. "No, you are a client and I am a nurse."
- C. "I like you, but our relationship is professional."
- D. "It's against my professional ethics to date clients."

Correct Answer: C. "I like you, but our relationship is professional."

This accepts the client as a person of worth rather than being cold or implying rejection. However, the nurse maintains a professional rather than a social role. Maintain a neutral, calm, and respectful manner, although with some clients this is easier said than done. Helps a client see himself or herself as respected as a person even when behavior might not be appropriate.

- **Option A:** Keep in mind clients with personality disorders might defend against feelings of low-self-esteem through blaming, projection, anger, passivity, and demanding behaviors. Many behaviors seen in PD clients cover a fragile sense of self. Often these behaviors are the crux of clients' interpersonal difficulties in all their relationships.
- **Option B:** Focus questions in a positive and active light; helps client refocus on the present and look to the future. For example, "What can you do differently now?" or "What have you learned from that experience?". Allows the client to look at past behaviors differently, and gives the client a sense that he or she has choices in the future.
- **Option D:** Give the client honest and genuine feedback regarding your observations as to his or her strengths, and areas that could use additional skills. Feedback helps give clients a more accurate view of self, strengths, areas to work on, as well as a sense that someone is trying to understand them.

27. Newly hired nurse Liza is excited to perform her very first physical assessment with a 19-year-old client. Which assessment examination requires Liza to wear gloves?

- A. Breast

- B. Integumentary
- C. Ophthalmic
- D. Oral

Correct Answer: D. Oral

Gloves should be worn anytime there is a risk of exposure to the client's blood or body fluids. Oral, rectal, and genital examinations require gloves because they involve contact with body fluids. Ophthalmic, breast, or integumentary examinations normally do not involve contact with the client's body fluids and do not require the nurse to wear gloves for protection.

- **Option A:** After completing the visual inspection, the patient should be instructed to lay supine. If a site-specific breast complaint is being evaluated, the examiner should begin his/her exam on the opposite, or "normal" side. As one breast is examined, the other is covered for the patient's comfort. The patient should place the ipsilateral hand above and/or behind their head to flatten the breast tissue as much as possible. The breast tissue itself is evaluated using a sequence of palpation that allows serial progression from superficial to deeper tissues.
- **Option B:** A general assessment of the skin begins at the initial contact with the patient and continues throughout the examination. Specific areas of the skin are assessed during the examination of other body systems unless the chief complaint is a dermatologic problem. However, if there are areas of skin breakdown or drainage, gloves should be used.
- **Option C:** The Royal College of Ophthalmologists have updated their advice on PPE to ophthalmologists and are now recommending that clinicians should wear standard surgical masks when examining or treating patients at the slit lamp. Gowns and gloves are not recommended. They also recommend that plastic breath shields attached to slit lamps provide some protection, but must be disinfected between patients as studies show that the COVID-19 virus is viable for up to 72 hours on plastic surfaces.

28. A patient who smokes tells the nurse, "I want to have a yearly chest x-ray so that if I get cancer, it will be detected early." Which response by the nurse is most appropriate?

- A. "Insurance companies do not authorize yearly x-rays just to detect early lung cancer."
- B. "Annual x-rays will increase your risk for cancer because of exposure to radiation."
- C. "Chest x-rays do not detect cancer until tumors are already at least a half-inch in size."
- D. "Frequent x-rays damage the lungs and make them more susceptible to cancer."

Correct Answer: C. "Chest x-rays do not detect cancer until tumors are already at least a half-inch in size."

- **Option C:** A tumor must be at least 1 cm large before it is detectable by an x-ray and may already have metastasized by that time.
- **Option A:** Insurance companies do not usually authorize x-rays for this purpose, but it would not be appropriate for the nurse to give this as the reason for not doing an x-ray.
- **Options B and D:** Radiographs have low doses of radiation, and an annual x-ray alone is not likely to increase lung cancer risk.

29. A client is admitted with a venous stasis leg ulcer. A nurse assesses the ulcer, expecting to note that the ulcer:

- A. Has a pale colored base.
- B. Is deep, with even edges.
- C. Has little granulation tissue.
- D. Has brown pigmentation around it.

Correct Answer: D. Has brown pigmentation around it.

Venous leg ulcers, also called stasis ulcers, tend to be more superficial than arterial ulcers, and the ulcer bed is pink. The edges of the ulcer are uneven, and granulation tissue is evident. The skin has a brown pigmentation from the accumulation of metabolic waste products resulting from venous stasis. The client also exhibits peripheral edema.

- **Option A:** Necrotic-base ulcers have a black appearance and are non-viable, indicating a peripheral arterial disease or an infection. Fibrotic-base ulcers have a white to yellowish stringy appearance and tend to halt the formation of the granulation tissue. Granular-base ulcers have a beefy red appearance and indicate a positive healing potential.
- **Option B:** In the visual assessment of the wound, we are looking for any possible erythemas, edema, fluid discharges, crepitations, or abscess collections. Inspect wound edges for any possible formation of hyperkeratotic tissues which tends to halt the tissue healing. A hyperkeratotic border results from increased stress on the tissue; therefore, the focal pressure should be evaluated.
- **Option C:** This is due to tissue malnutrition, and thus an arterial problem. Quantitative measurements should be checked at every clinic visit. A comparison of the wound dimensions, including the width, length, and depth over time allows for the evaluation of the wound contracture. Ulceration discharge cultures can be obtained to target antibiotic therapy in the presence of an infection.

30. In the late 1950s, consumers and health care professionals began challenging the routine use of analgesics and anesthetics during childbirth. Which of the following was an outgrowth of this concept?

- A. Labor, delivery, recovery, postpartum (LDRP)
- B. Nurse-midwifery
- C. Clinical nurse specialist
- D. Prepared childbirth

Correct Answer: D. Prepared childbirth

Prepared childbirth was the direct result of the 1950s challenging the routine use of analgesic and anesthetics during childbirth.

- **Option A:** The LDRP was a much later concept and was not a direct result of the challenging of routine use of analgesics and anesthetics during childbirth.
- **Option B:** A nurse-midwife is a licensed healthcare professional who specializes in women's reproductive health and childbirth. In addition to attending births, they perform annual exams, give counseling, and write prescriptions. According to the ACNM, the vast majority of midwives in the U.S. are CNMs.

- **Option C:** Clinical nurse specialists (CNS) are advanced practice registered nurses (APRNs) that serve as experts in evidence-based nursing practice within one of a number of different specialty areas. They integrate their advanced knowledge of disease processes in assessing, diagnosing, and treating patient illnesses, but their role extends beyond providing patient care.

31. What is meant by the “fittingness” of a research study? A. Truth of findings as judged by the participants.

- A. Truth of findings as judged by the participants.
- B. The appropriateness of the interview questions posed.
- C. Faithfulness to everyday reality of the participants.
- D. The adequacy of the coding system used.

Correct Answer: C. Faithfulness to everyday reality of the participants.

Fittingness is the meaningfulness of the everyday findings to everyday reality of that situation. Are the results described in enough detail so that one may evaluate them for their own practice?

- **Option A:** Credibility is the truth of findings as judged by the participants. To help establish, the researcher should return to the original participants and get them to validate the findings. Others within the discipline may also help establish by review of the data and findings.
- **Option B:** Auditability assists the reader to judge the appropriateness of the interview questions posed. Auditability is established by the reader being able to follow the steps of the research from the research questions, to the data collection, to the data, and then to the findings (categories, themes, model).
- **Option D:** Auditability assists the reader to judge the adequacy of the coding system used. By the steps for interpretation and synthesis and data examples provided, the reader should be able to follow the researcher’s thinking.

32. Ricky’s grandmother has been suffering from persistent vomiting for two days now. She appears to be lethargic and weak and has myalgia. She is noted to have dry mucus membranes and her capillary refill takes >4 seconds. She is diagnosed as having gastroenteritis and dehydration. Measurement of arterial blood gas shows pH 7.5, PaO₂ 85 mm Hg, PaCO₂ 40 mm Hg, and HCO₃ 34 mmol/L. What acid-base disorder is shown?

- A. Respiratory Alkalosis, Uncompensated
- B. Respiratory Acidosis, Partially Compensated
- C. Metabolic Alkalosis, Uncompensated
- D. Metabolic Alkalosis, Partially Compensated

Correct Answer: C. Metabolic Alkalosis, Uncompensated

The primary disorder is uncompensated metabolic alkalosis (high HCO₃⁻). As CO₂ is the strongest driver of respiration, it generally will not allow hypoventilation as compensation for metabolic alkalosis.

33. A 24-year-old female, who recently returned from a mountaineering expedition, is admitted to the ER presenting with confusion. The patient's medical records indicate a history of a myeloma diagnosis. She also reports having experienced constipation, intense abdominal pain, and polyuria during her expedition. She mentions that she had limited access to water and relied heavily on packaged foods during her trip. Given her recent activities, medical history, and the presenting signs and symptoms, which of the following conditions would you most likely suspect?

- A. Diverticulosis
- B. Hypercalcemia
- C. Hypocalcemia
- D. Irritable bowel syndrome
- E. Altitude sickness
- F. Dehydration

Correct Answer: B. Hypercalcemia

Hypercalcemia is characterized by elevated calcium levels in the blood. Myeloma can lead to bone destruction, which releases calcium into the bloodstream. The symptoms of hypercalcemia include confusion, polyuria (increased urination), constipation, and abdominal pain, all of which the patient is experiencing. While the other options might be considered given certain aspects of her presentation, the combination of her myeloma diagnosis and the specific symptoms she's exhibiting make hypercalcemia the most likely suspect.

34. At what stage of labor and delivery does a primigravida differ mainly from a multigravida?

- A. Stage 1
- B. Stage 2
- C. Stage 3
- D. Stage 4

Correct Answer: A. Stage 1

In stage 1 during normal vaginal delivery of a vertex presentation, the multigravida may have about 8 hours of labor while the primigravida may have up to 12 hours labor.

- **Option B:** The second stage of labor commences with complete cervical dilation to 10 centimeters and ends with the delivery of the neonate. In women who have delivered vaginally previously, whose bodies have acclimated to delivering a fetus, the second stage may only require a brief trial, whereas a longer duration may be required for a nulliparous female.
- **Option C:** The third stage of labor commences when the fetus is delivered and concludes with the delivery of the placenta. Separation of the placenta from the uterine interface is hallmarked by three cardinal signs including a gush of blood at the vagina, lengthening of the umbilical cord, and a globular shaped uterine fundus on palpation.

- **Option D:** During the fourth stage of labor, the baby is born, the placenta has delivered, and the woman and her partner will probably feel joy, relief, and fatigue. Most babies are ready to nurse within a short period after birth. Others wait a little longer. If the woman is planning to breastfeed, it is strongly encouraged to try to nurse as soon as possible after the baby is born. Nursing right after birth will help the uterus to contract and will decrease the amount of bleeding.

35. At Joyful Steps Pediatric Center, Nurse Adrian is preparing for the post-operative care of little Isabelle, an 18-month-old who is soon to undergo surgery for her cleft palate repair. The child's parents, both visibly anxious, have been asking multiple questions about the postoperative period. They express their concerns about ensuring Isabelle doesn't hurt herself or disrupt the surgical site. Having assisted in many such surgeries, Nurse Adrian is familiar with the measures to ensure safety and minimize trauma to the operative site, including the use of certain restraints. He gathers the appropriate materials and is prepared to educate the parents on their application and purpose. Considering Isabelle's upcoming cleft palate repair, which type of restraints are typically used post-operatively to ensure the safety and integrity of the surgical site?

- A. Elbow restraints
- B. Full arm restraints
- C. Wrist restraints
- D. Mummy restraints
- E. Soft mittens
- F. Leg restraints

Correct Answer: A. Elbow restraints

These are the most commonly used restraints after cleft palate repair. By preventing full extension of the elbow, these restraints deter the child from touching or disturbing the surgical site with their hands, while still allowing for some arm movement.

- **Option B:** Full arm restraints: These would be overly restrictive and are not typically used for children post cleft palate surgery. The goal is to prevent the child from reaching their mouth, which elbow restraints adequately address.
- **Option C:** Wrist restraints: These restraints are not ideal as they may not effectively prevent the child from reaching up to the surgical site.
- **Option D:** Mummy restraints: These are used for specific procedures where more restrictive immobilization is necessary, but they are not typically used post cleft palate surgery as they are overly restrictive.
- **Option E:** Soft mittens: While these might prevent direct trauma from the fingers, they don't prevent the child from reaching and potentially harming the surgical site. They are not as effective as elbow restraints.
- **Option F:** Leg restraints: These are not relevant to the care for post cleft palate surgery and wouldn't prevent the child from reaching the surgical area.

36. A client with tonic-clonic seizure is receiving phenobarbital (Luminal) and valproic acid (Depakene). The nurse tells the client that:

- A. Valproic acid decreases phenobarbital metabolism.
- B. Valproic acid increases phenobarbital metabolism.
- C. There is no interaction between the two.
- D. Increase the dosage of the two medications.

Correct Answer: A. Valproic acid decreases phenobarbital metabolism.

Valproic acid appears to decrease phenobarbital metabolism, thus there is increased levels of phenobarbital in the body. Therefore, phenobarbital blood levels should be monitored and appropriate dosage adjustments made as indicated.

37. 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.

38. The long-term complications seen in thalassemia major are associated to which of the following?

- A. Anemia
- B. Growth retardation
- C. Hemochromatosis

D. Splenomegaly

Correct Answer: C. Hemochromatosis

Long-term complications arise from hemochromatosis, excessive iron deposits precipitating in the tissues, and causing destruction. Hemochromatosis is a disorder associated with deposits of excess iron that causes multiple organ dysfunction. Hemochromatosis occurs when there are high pathologic levels of iron accumulation in the body. Hemochromatosis has been called “bronze diabetes” due to the discoloration of the skin and associated disease of the pancreas.

- **Option A:** Anemia is a sign of this disorder. Skin can show pallor due to anemia and jaundice due to hyperbilirubinemia resulting from intravascular hemolysis. Patients usually report fatigue due to anemia as the first presenting symptom.
- **Option B:** Anemia can inhibit a child's growth rate, and thalassemia can cause a delay in puberty. Particular attention should focus on the child's growth and development according to age.
- **Option D:** Cellular damage from hemochromatosis may lead to splenomegaly. Hepatosplenomegaly can result from chronic iron deposition and also from extramedullary hematopoiesis in these organs. Splenic infarcts or autophagy result from chronic hemolysis due to poorly regulated hematopoiesis.

39. Nurse Jeremy is evaluating a client's fluid intake and output record. Fluid intake and urine output should relate in which way?

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

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

Normally, fluid intake is approximately equal to the urine output. Any other relationship signals an abnormality. One general principle for all patient scenarios is to replace whatever fluid is being lost as accurately as possible. The strategy of managing a patient's fluid differs depending on each patient's clinical condition. If they can drink adequate fluid volumes by mouth, this should be the first choice. Some patients can tolerate other enteral options, such as feeding tubes. IV plus oral orders are effective for those unable to meet their total daily fluid requirements enterally.

- **Option A:** Fluid intake that is double the urine output indicates fluid retention. Monitor for peripheral edema, pulmonary edema, or hepatomegaly. It is important to consider underlying cardiac dysfunction or renal failure and adjust volumes of administration accordingly. These patients might require a lower maintenance fluid rate than expected for their body weight.
- **Option C:** Fluid intake that is half the urine output indicates dehydration. A drop of at least 20 mm Hg systolic blood pressure or 10 mm Hg diastolic blood pressure within 2 to 5 minutes of quiet standing after 5 minutes of supine rest indicates orthostatic hypotension. Dehydrated or elderly patients who have lost sensitivity in their baroreceptors in their blood vessels might display these findings.
- **Option D:** Normally, fluid intake isn't inversely proportional to the urine output. One can see weight gain in states of fluid excess and weight loss in states of fluid deficit. It is also helpful to look at patient records to see any recent outpatient visits before hospitalization, which might indicate a patient's normal baseline weight.

40. A 21-year-old male with Hodgkin's lymphoma is a senior at the local university. He is engaged to be married and is to begin a new job upon graduation. Which of the following diagnoses would be a priority for this client?

- A. Sexual dysfunction related to radiation therapy
- B. Anticipatory grieving related to terminal illness
- C. Tissue integrity related to prolonged bed rest
- D. Fatigue related to chemotherapy

Correct Answer: A. Sexual dysfunction related to radiation therapy

Radiation therapy often causes sterility in male clients and would be of primary importance to this client. The psychosocial needs of the client are important to address in light of the age and life choices. Hodgkin's disease, however, has a good prognosis when diagnosed early. Know the importance of sex to individual, partner, and patient's motivation for change. Because lymphomas often affect the relatively young who are in their productive years, these people may be affected more by these problems and may be less knowledgeable about the possibilities of change.

- **Option B:** Grieving may not be an appropriate diagnosis since the client would be experiencing new milestones in his life despite his condition. Let the patient describe the problem in own words. Provides a more accurate picture of patient experience with which to develop a plan of care.
- **Option C:** Option B is not applicable since the client is not on bed rest. Encourage the patient to share thoughts and concerns with his partner and to clarify values and impact of condition on relationship. Helps the couple begin to deal with issues that can strengthen or weaken the relationship.
- **Option D:** Fatigue may occur during chemotherapy, but it is not the priority diagnosis. Identify pre-existing and current stress factors that may be affecting the relationship. The patient may be concerned about other issues, such as job, financial, and illness-related problems.

41. Which of the following statements about Attention deficit hyperactivity disorder (ADHD) in children is false?

- A. Black parents tend to be less sure of potential causes of and treatments for ADHD than white parents, and they are less likely to connect ADHD to their child's school experiences.
- B. Because of its frequent genetic etiology, ADHD in a child is likely foreshadowed by ADHD in other family members.
- C. The chances of successful treatment are adversely affected if the parent responsible for implementing the treatment has untreated ADHD.
- D. More than 40% of respondents in the recent National Stigma Study-Children (NSS-C) believe that children will face rejection in school for receiving mental health treatment and that negative ramifications will continue into adulthood. More than half expected psychiatric medications to cause a zombie-like effect.
- E. The Multimodal Treatment Study of Children with ADHD suggests that pharmacological treatment of ADHD is as effective as behavioral therapy alone.

Correct Answer: E. The Multimodal Treatment Study of Children with ADHD suggests that pharmacological treatment of ADHD is as effective as behavioral therapy alone.

Multimodal treatment involves multiple methods of treatment that work together to help a child with ADHD. The main components of this approach are medications, behavioral therapy, and education.

- **Option A:** In order to diagnose ADHD, it is very important to take a relevant history of the concerned individual. ADHD is diagnosed in children based upon their history where the children face difficulty in at least 6 of the 9 symptoms as mentioned in DSM 5.
- **Option B:** It is one of the most heritable conditions in terms of psychiatric disorders. There is a much greater concordance in monozygotic twins than dizygotic twins. Siblings have twice the risk of having ADHD than the general population.
- **Option C:** The general rule of thumb is that 50% of patients “grow out of” ADHD, especially with treatment, and another 25% do not need treatment into adulthood. This is theorized twofold; first that stimulants help improve the development of the frontal lobe over time, and second that adults often choose careers that don’t require sustained attention.
- **Option D:** Untreated ADHD can cause persisting dysfunction and devastating consequences included but not limited to long-term inability to work, increased car accidents, and increased substance abuse.

42. While Lawrence is being assessed at the clinic, Nurse Rachel observed that the child appears to be small, with an immature face and chubby body build. Her parents stated that their child’s rate of growth of all body parts is somewhat slow, but her proportions and intelligence remain normal. As a knowledgeable nurse, you know that the child has a deficiency of which of the following?

- A. Antidiuretic hormone (ADH)
- B. Parathyroid hormone (PTH)
- C. Growth hormone (GH)
- D. Melanocyte-stimulating hormone (MSH)

Correct Answer: C. Growth hormone (GH)

GH stimulates protein anabolism, promoting bone and soft-tissue growth. A lack of GH would lead to decreased synthesis of somatomedin, resulting in decreased linear growth and decreased fat metabolism, and increased glucose uptake in muscles, resulting in excessive subcutaneous fat hypoglycemia.

- **Option A:** A deficiency in ADH results in diabetes insipidus, marked by dehydration and hypernatremia. Diabetes insipidus (DI) is a disease process that results in either decreased release of antidiuretic hormone (ADH, also known as vasopressin or AVP) or decreased response to ADH, causing electrolyte imbalances.
- **Option B:** Deficiency of PTH causes hypocalcemia, marked by tetany, convulsions, and muscle spasms. It’s not uncommon after thyroid or other head and neck surgeries to get transient or permanent hypoparathyroidism leading to hypocalcemia. This can be a result of unintentional removal of parathyroid glands or a loss of blood supply in some cases.
- **Option D:** Deficiency of MSH causes diminished or absent skin pigmentation. Melanocyte-stimulating hormone (alpha-melanotropin, MSH) may function in a number of diverse physiological roles. MSH stimulates (1) rapid translocation of melanosomes (melanin granules) in dermal melanophores to effect rapid color change and (2) melanogenesis in normal and abnormal (melanoma) epidermal melanocytes.

43. A nurse educator is preparing a seminar for a group of new graduate nurses who will be starting their careers in the pediatric intensive care unit. Given the vulnerability of the pediatric population to certain infections, the educator wants to emphasize the importance of understanding meningitis and its causative agents. When discussing the microorganisms responsible for meningitis in humans, which of the following should the nurse educator highlight as NOT being linked to meningitis?

- A. S. pneumoniae
- B. H. influenzae
- C. N. meningitidis
- D. Cl. difficile

Correct Answer: D. Cl. difficile

Cl. difficile has not been linked to meningitis. Clostridium difficile (C. diff) is a germ (bacteria) that causes life-threatening diarrhea. It is usually a side-effect of taking antibiotics.

- **Option A:** Pneumococcal meningitis is caused by Streptococcus pneumoniae. The most common route of infection starts by nasopharyngeal colonization by Streptococcus pneumoniae, which must avoid mucosal entrapment and evade the host immune system after local activation.
- **Option B:** H influenzae meningitis is caused by Haemophilus influenzae type B bacteria. It is the leading cause of bacterial meningitis in children under age 5. Haemophilus species are small oxidase-positive pleomorphic gram-negative aerobic or facultative anaerobic coccobacilli. Humans are the only known host for Haemophilus influenza.
- **Option C:** Bacteria called Neisseria meningitidis cause meningococcal disease. About 1 in 10 people have these bacteria in the back of their nose and throat without being ill.

44. Tim is admitted with a diagnosis of delusions of grandeur. The nurse is aware that this diagnosis reflects a belief that one is:

- A. Highly important or famous.
- B. Being persecuted.
- C. Connected to events unrelated to oneself.
- D. Responsible for the evil in the world.

Correct Answer: A. Highly important or famous.

A delusion of grandeur is a false belief that one is highly important or famous. A delusion of grandeur is the false belief in one's own superiority, greatness, or intelligence. People experiencing delusions of grandeur do not just have high self-esteem; instead, they believe in their own greatness and importance even in the face of overwhelming evidence to the contrary.

- **Option B:** A delusion of persecution is a false belief that one is being persecuted. Persecutory delusions occur when someone believes others are out to harm them despite evidence to the contrary. It's a type of paranoid thinking that can be part of several different mental illnesses. Whether people with this condition think coworkers are sabotaging their work or they believe the government is trying to kill them, persecutory delusions vary in severity. Some individuals with

persecutory delusions believe they have to go to great lengths to stay safe—and consequently, they may struggle to function normally.

- **Option C:** An idea of reference—sometimes called a delusion of reference—is the false belief that irrelevant occurrences or details in the world relate directly to oneself. Ideas of reference are variations on this behavior, and occur when a person believes something is referring to them when it is not. For example, a person shopping in a store might see two strangers laughing and believe that they are laughing at him or her when in reality the other two people do not even notice the person. Some mental health professionals believe this thought error is a type of cognitive bias.
- **Option D:** A delusion of reference is a false belief that one is connected to events unrelated to oneself or a belief that one is responsible for the evil in the world. A delusion of reference is a more strongly-held idea of reference. While a person experiencing an idea of reference will change his or her mind when the evidence dictates he/she must, a person experiencing a delusion will believe something refers back to him or her even in the face of strong evidence to the contrary.

45. Eleanor, a 58-year-old botanist, has been living with gout for several years. During her most recent flare-up, her rheumatologist prescribed colchicine to help manage her symptoms. Today, she arrives at the clinic for a follow-up appointment. As Nurse Kelvin takes her history and conducts a physical assessment, which finding would warrant his immediate intervention and possibly a change in her treatment regimen?

- A. Several episodes of watery diarrhea throughout the day.
- B. A rosy hue across her cheeks and nose, resembling mild sunburn.
- C. Complaints of recurrent nausea accompanied by episodes of vomiting.
- D. Persistent pain and swelling in her right ankle.

Correct Answer: A. Several episodes of watery diarrhea throughout the day.

Diarrhea is a common side effect of colchicine and can indicate toxicity. Severe diarrhea can lead to dehydration and electrolyte imbalances, which can have serious health consequences. This side effect would require the nurse's immediate intervention, and the healthcare provider might need to adjust the dosage or consider an alternative treatment.

- **Option B:** While flushing of the skin can be a side effect of many medications, it is not specifically a recognized side effect of colchicine. However, any new symptom should be noted and discussed with the healthcare provider, but it doesn't demand the same immediacy as potential drug toxicity.
- **Option C:** Nausea and vomiting are potential side effects of colchicine and can also indicate toxicity. While they are concerning and warrant intervention, severe diarrhea is more directly indicative of colchicine toxicity and poses immediate risks.
- **Option D:** Pain and swelling are manifestations of gout. Although they are uncomfortable for the patient, they are not directly related to colchicine toxicity. The goal of treatment with colchicine is to reduce these symptoms, so their presence might indicate that the medication's efficacy should be evaluated. However, they don't necessitate the same immediate action as potential drug toxicity symptoms.

46. A client has just received a renal transplant and has started cyclosporine therapy to prevent graft rejection. Which of the following conditions is a major

complication of this drug therapy?

- A. Depression
- B. Hemorrhage
- C. Infection
- D. Peptic ulcer disease

Correct Answer: C. Infection

Infection is the major complication to watch for in clients on cyclosporine therapy because it's an immunosuppressive drug. Urinary tract infections are common within the first 6 months. Opportunistic infections are more likely to occur 1–6 months after transplantation, reflecting the greater impact of immunosuppression during this time. Reactivation of latent pathogens such as polyomavirus BK, hepatitis C virus (HCV), and mycobacterium tuberculosis may also occur.

- **Option A:** Depression may occur posttransplantation but not because of cyclosporine. While kidney transplantation offers several advantages in terms of improved clinical outcomes and quality of life compared to dialysis modalities, depressive symptoms are still present in approximately 25% of patients, rates comparable to that of the hemodialysis population.
- **Option B:** Hemorrhage is a complication associated with anticoagulant therapy. Bleeding is the most important complication of VKAs and a major concern for both physicians and patients. The occurrence of bleeding during treatment is not only important for the treated subjects, but also for correct and complete use of this therapy in all the subjects who have a clear clinical indication for anticoagulation.
- **Option D:** Peptic ulcer disease is a complication of steroid therapy. It is suggested that the mechanisms responsible for peptic ulcer formation induced by corticosteroids include enhanced gastrin and parietal cell hyperplasia with increased acid secretion, diminished gastric mucus synthesis, and suppressed arachidonic acid metabolism and prostaglandin (PG) synthesis.

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

- A. There is no need to change eating habits.
- B. Eat six small meals a day.
- C. Eat the largest meal in the evening.
- D. Restrict fluid intake.

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

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

- **Option A:** The patient should eat 5 to 6 small meals throughout the day. He should remember to eat slowly and chew his food well. It's important the patient tries to maintain his weight. After surgery, foods may affect the patient differently. Certain foods may make him have bowel movements right after he eats them.

- **Option C:** Certain foods may cause diarrhea (loose or watery bowel movements). The patient may need to change his diet after surgery. During the first few months after the surgery, the patient will need to test foods and see how he reacts to them. It may be helpful to keep a food diary. This will help keep track of which foods cause discomfort.
- **Option D:** The patient should drink 8 to 10 (8-ounce) glasses of liquids every day. The amount of alcohol the patient drinks can affect him during and after the surgery. If the patient stops drinking alcohol suddenly, it can cause seizures, delirium, and death.

48. A client with Congestive heart failure is about to take a dose of furosemide (Lasix). Which of the following potassium levels, if noted in the client's record, should be reported before giving the due medication?

- A. 5.1 mEq/L.
- B. 4.9 mEq/L.
- C. 3.9 mEq/L.
- D. 3.3 mEq/L.

Correct Answer: D. 3.3 mEq/L.

The normal potassium level is 3.5 to 5.5 mEq/L. Low potassium levels can be dangerous, especially for people with CHF. Low potassium can cause fatal heart arrhythmias. An abnormal serum K⁺ level is associated with an increased risk of ventricular arrhythmia and sudden cardiac death (SCD) and these patients are generally prescribed furosemide and potassium chloride (KCl).

- **Option A:** Furosemide, a short-acting diuretic is commonly recommended as an essential drug in patients with heart failure and fluid retention. A recent study has shown that furosemide administration increases mortality in heart failure rat models. The commonly used drugs, furosemide, and KCl in the treatment of various diseases render the differential expression of proteins in the LV tissue, which is involved in the cardiac conductivity.
- **Option B:** The risk of hypokalemia increases with the use of a high dose of furosemide, decreased oral intake of potassium in patients with hyperaldosteronism states (liver abnormalities or licorice ingestion), or concomitant use of corticosteroid, ACTH, and laxatives.
- **Option C:** Careful monitoring of the patient's clinical condition, daily weight, fluids intake, and urine output, electrolytes, i.e., potassium and magnesium, kidney function monitoring with serum creatinine and serum blood urea nitrogen level is vital to monitor the response to furosemide. If indicated as diuresis with furosemide, replete electrolytes lead to electrolyte depletion and adjust the dose or even hold off on furosemide if laboratory work shows signs of kidney dysfunction.

49. Which behavioral assessment in a child is most consistent with a diagnosis of conduct disorder?

- A. Arguing with adults
- B. Gross impairment in communication
- C. Physical aggression toward others
- D. Refusal to separate from caretaker

Correct Answer: C. Physical aggression toward others

Physical aggression toward others is a significant criterion consistent with the diagnoses of conduct disorder. Conduct disorder (CD) lies on a spectrum of disruptive behavioral disorders, which also include oppositional defiant disorder (ODD). In some cases, ODD is a precursor to CD. CD is characterized by a pattern of behaviors that demonstrate aggression and violation of the rights of others and evolves over time.

- **Option A:** Arguing with adults may indicate a lesser disorder, oppositional defiant disorder. Conduct disorder is a problem that involves a violation of social rules. Oppositional defiant disorder (ODD) is a type of childhood disruptive behavior disorder that primarily involves problems with the self-control of emotions and behaviors.
- **Option B:** Gross impairment in communication can be a sign of autism. Autism is a neurodevelopmental disorder characterized by severe impairment in reciprocal social interactions and communication skills, as well as the presence of restricted and stereotypical behaviors.
- **Option D:** Refusal to separate from a caretaker is a behavior that is more consistent with other mental disorders that can affect children. Anxiety disorders are characterized by excessive or inappropriate fear, with associated behavioral disturbances that impair functioning (APA 2013). Children with anxiety disorders have clinical symptoms, such as excessive anxiety; severe physiological anxiety symptoms; behavioral disturbances, such as avoidance of feared objects; and associated distress or impairment.

50. Marie Joy's lab test revealed that her serum calcium is 2.5 mEq/L. Which assessment data does the nurse document when a client diagnosed with hypocalcemia develops a carpopedal spasm after the blood-pressure cuff is inflated?

- A. Positive Trousseau's sign
- B. Positive Chvostek's sign
- C. Tetany
- D. Paresthesia

Correct Answer: A. Positive Trousseau's sign

In a client with hypocalcemia, a positive Trousseau's sign refers to carpopedal spasm that develops usually within 2 to 5 minutes after applying and inflating a blood pressure cuff to about 20 mm Hg higher than systolic pressure on the upper arm. This spasm occurs as the blood supply to the ulnar nerve is obstructed.

- **Option B:** Chvostek's sign refers to twitching of the facial nerve when tapping below the earlobe. In the late 1800s, Dr. Chvostek noticed that mechanical stimulation of the facial nerve (as with the fingertip of the examiner, for example) could lead to twitching of the ipsilateral facial muscles. The long-accepted explanation is that this resulted from hypocalcemia, and this relationship became known as the Chvostek sign.
- **Option C:** Tetany is a clinical manifestation of hypocalcemia denoted by tingling in the tips of the fingers around the mouth and muscle spasms in the extremities and face. Tetany is generally induced by a rapid decline in serum ionized calcium. Tetany is usually most dangerous and most commonly seen in the presence of respiratory alkalosis causing hypocalcemia.
- **Option D:** Paresthesia refers to numbness or tingling. Paresthesia is an abnormal sensation of the skin (tingling, pricking, chilling, burning, numbness) with no apparent physical cause. Paresthesia may be transient or chronic and may have any of dozens of possible underlying causes.

51. 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.

52. The nurse is assessing a postoperative adult patient. Which of the following should the nurse document as subjective data?

- A. Vital signs
- B. Laboratory test result
- C. Patient's description of pain
- D. Electrocardiographic (ECG) waveforms

Correct Answer: C. Patient's description of pain

Subjective data come directly from the patient and usually are recorded as direct quotations that reflect the patient's opinions or feelings about a situation. Subjective data provide clues to possible physiologic, psychological, and sociologic problems. They also provide the nurse with information that may reveal a client's risk for a problem as well as areas of strengths for the client. The information is obtained through interviewing. Vital signs, laboratory test results, and ECG waveforms are examples of objective data.

- **Option A:** Vital sign monitoring is a fundamental component of nursing care. A patient's pulse, respirations, blood pressure, and body temperature are essential in identifying clinical deterioration and that these parameters must be measured consistently and recorded accurately.
- **Option B:** Many other tests are reported as numbers or values. Laboratory test results reported as numbers are not meaningful by themselves. Their meaning comes from comparison to reference values. Reference values are the values expected for a healthy person. They are sometimes called "normal" values.
- **Option D:** The standard 12-lead electrocardiogram (ECG) is one of the most commonly used medical studies in the assessment of cardiovascular disease. It is the most important test for interpretation of the cardiac rhythm, detection of myocardial ischemia and infarction, conduction system abnormalities, preexcitation, long QT syndromes, atrial abnormalities, ventricular hypertrophy, pericarditis, and other conditions.

53. A client with diabetes mellitus states, "I cannot eat big meals; I prefer to snack throughout the day." The nurse should carefully explain that:

- A. Regulated food intake is basic to control
- B. Salt and sugar restriction is the main concern
- C. Small, frequent meals are better for digestion
- D. Large meals can contribute to a weight problem

Correct Answer: A. Regulated food intake is basic to control

An understanding of the diet is imperative for compliance. A balance of carbohydrates, proteins, and fats usually apportioned over three main meals and two between meals snacks need to be tailored to the client's specific needs, with due regard for activity, diet, and therapy.

- **Option B:** Many people with diabetes also have dyslipidemia and hypertension, making reductions in dietary intake of saturated fat, cholesterol, and sodium desirable. Therefore, the emphasis of nutrition therapy for type 2 diabetes is on lifestyle strategies to reduce glycemia, dyslipidemia, and blood pressure.
- **Option C:** Division of food intake, three meals or smaller meals and snacks, should be based on individual preferences. Treatment with insulin or insulin secretagogues requires consistency in timing of meals and carbohydrate content.
- **Option D:** Carbohydrate and monounsaturated fat together should provide 60–70% of energy intake. However, the metabolic profile and need for weight loss should be considered when determining the monounsaturated fat content of the diet.

54. The amniotic fluid of a client has a greenish tint. The nurse interprets this to be the result of which of the following?

- A. Lanugo
- B. Hydramnios
- C. Meconium
- D. Vernix

Correct Answer: C. Meconium

The greenish tint is due to the presence of meconium. Meconium is a thick, green, tar-like substance that lines the baby's intestines during pregnancy. Typically this substance is not released in the baby's bowel movements until after birth. However, sometimes a baby will have a bowel movement prior to birth, excreting the meconium into the amniotic fluid.

- **Option A:** Lanugo is the soft, downy hair on the shoulders and back of the fetus. This downy, unpigmented hair is the first type of hair that grows from hair follicles. It can be found everywhere on a baby's body, except on the palms, lips, and soles of the feet. Most fetuses develop lanugo around the fourth or fifth month of pregnancy.
- **Option B:** Hydramnios represents excessive amniotic fluid.
- **Option D:** Vernix is the white, cheesy substance covering the fetus. It is produced by dedicated cells and is thought to have some protective roles during fetal development and for a few hours after birth.

55. A nurse is evaluating therapy with the family of a client with anorexia nervosa. Which of the following would indicate that the therapy was successful?

- A. The parents reinforced increased decision-making by the client.
- B. The parents clearly verbalize their expectations for the client.
- C. The client verbalizes that family meals are now enjoyable.
- D. The client tells her parents about feelings of low-self esteem.

Correct Answer: A. The parents reinforced increased decision making by the client

One of the core issues concerning the family of a client with anorexia is control. The family's acceptance of the client's ability to make independent decisions is key to successful family intervention. Discourage members from asking for approval from each other. Be alert to verbal or nonverbal checking with others for approval. Acknowledge the competent actions of the patient. Each individual needs to develop own internal sense of self-esteem. Individuals often are living up to others' (family's) expectations rather than making their own choices. Acknowledgment provides recognition of self in positive ways.

- **Option B:** Identify patterns of interaction. Encourage each family member to speak for self. Do not allow two members to discuss a third without that member's participation. Helpful information for planning interventions. The enmeshed, over-involved family members often speak for each other and need to learn to be responsible for their own words and actions.
- **Option C:** Reinforce the importance of parents as a couple who have rights of their own. The focus on the child with anorexia is very intense and often is the only area around which the couple interacts. The couple needs to explore their own relationship and restore the balance within it to prevent its disintegration.
- **Option D:** Although the remaining options may occur during the process of therapy, they would not necessarily indicate a successful outcome; the central family issues of dependence and independence are not addressed in these responses. Encourage and allow expression of feelings (crying, anger) by individuals. Often these families have not allowed free expression of feelings and need help and permission to learn and accept this.

56. The nurse is evaluating the client who was admitted 8 hours ago for induction of labor. The following graph is noted on the monitor. Which action should be taken first by the nurse?

- A. Instruct the client to push
- B. Perform a vaginal exam
- C. Turn off the Pitocin infusion
- D. Place the client in a semi-Fowler's position

Correct Answer: C. Turn off the Pitocin infusion

The monitor indicates variable decelerations caused by cord compression. If Pitocin is infusing, the nurse should turn off the Pitocin.

- **Option A:** Instructing the client to push is incorrect because pushing could increase the decelerations and because the client is 8cm dilated, making answer A incorrect.
- **Options B and D:** Performing a vaginal exam should be done after turning off the Pitocin, and placing the client in a semi-Fowler's position is not appropriate for this situation.

57. The clinic nurse is preparing to test the visual acuity of a client using a Snellen chart. Which of the following identifies the accurate procedure for this visual acuity test?

- A. Both eyes are assessed together, followed by the assessment of the right and then the left eye.
- B. The right eye is tested followed by the left eye, and then both eyes are tested.
- C. The client is asked to stand at a distance of 40ft. from the chart and is asked to read the largest line on the chart.
- D. The client is asked to stand at a distance of 40ft from the chart and to read the line that can be read 200 ft away by an individual with unimpaired vision.

Correct Answer: B. The right eye is tested followed by the left eye, and then both eyes are tested.

Visual acuity is assessed in one eye at a time, and then in both eyes together with the client comfortably standing or sitting. The right eye is tested with the left eye covered; then the left eye is tested with the right eye covered. Both eyes then are tested together. Visual acuity is measured with or without corrective lenses and the client stands at a distance of 20ft. from the chart. A visual acuity test is only one part of a comprehensive ophthalmologic examination. The goal of the visual acuity test is to determine clarity or sharpness of vision.

- **Option A:** Cover the patient's eye with their hand or an occluder card. Some testers prefer to test the eyes in the same order on all patients. An alternative is to test the eye with worse vision first to reduce remembered letters. The second eye can also read the letters backward to reduce remembered letters.
- **Option C:** Position the patient in a well-lit area so that they are a standard distance from the chart. The testing distance is typically 20 feet (6 m), but this may vary. In smaller spaces, mirrors can be used to achieve the required distance. Additionally, a near Snellen chart may be used at 14 inches in some cases, which would require reading glasses if applicable.

- **Option D:** Move the patient closer to the chart if they are unable to read to the top line, the new distance from the chart becomes the numerator in a fraction reporting system. For example, if able to read the top line at 10 feet, the patient's vision would be represented as 10/200.

58. Mr. and Mrs. Robertson's son was diagnosed with idiopathic thrombocytopenic purpura. They should be aware that the drug to be avoided is:

- A. Acetaminophen
- B. Aspirin
- C. Codeine
- D. Morphine

Correct Answer: B. Aspirin

Aspirin exerts an antiplatelet action and therefore may increase platelet destruction in ITP. Aspirin inhibits platelet function by acetylating platelet cyclooxygenase, increasing the risk of bleeding because it adds a prolonged platelet functional defect to the quantitative defect already present from the severe thrombocytopenia.

- **Option A:** Acetaminophen (paracetamol) is widely used for postoperative analgesia. Its mechanism of action is inhibition of prostaglandin synthesis in the central nervous system, and acetaminophen is traditionally not considered to influence platelet function.
- **Option C:** Non-steroidal anti-inflammatory drugs (NSAID), such as ibuprofen (Nurofen, etc.) should also be avoided for similar reasons. Paracetamol or codeine can be recommended for adults.
- **Option D:** Although it has a very low incidence worldwide, morphine-induced thrombocytopenia can occur in some patients especially with higher doses. From eHealthMe study, from the FDA reports published On January 26, 2015: There were 48,666 people reported to have side effects when taking morphine. Among them, 156 people (0.32%) have Heparin-induced Thrombocytopenia.

59. Ricardo is scheduled for a prostatectomy, and the anesthesiologist plans to use a spinal (subarachnoid) block during surgery. In the operating room, the nurse positions the client according to the anesthesiologist's instructions. Why does the client require special positioning for this type of anesthesia?

- A. To prevent confusion.
- B. To prevent seizures.
- C. To prevent cerebrospinal fluid (CSF) leakage.
- D. To prevent cardiac arrhythmias.

Correct Answer: C. To prevent cerebrospinal fluid (CSF) leakage

The client receiving a subarachnoid block requires special positioning to prevent CSF leakage and headache and to ensure proper anesthetic distribution.

- **Option A:** Anesthetics are well known to cause confusion, but this typically decreases as the body processes the medications and removes them from circulation.

- **Option B:** Generalized seizure as a complication following epidural anesthesia has been reported, but rarely following spinal anesthesia.
- **Option D:** The incidence of arrhythmias, as well as hypotension during spinal anesthesia, is higher for Cesarean section mostly.

60. Which human element considered by the nurse in charge during assessment can affect drug administration?

- A. The patient's ability to recover
- B. The patient's occupational hazards
- C. The patient's socioeconomic status
- D. The patient's cognitive abilities

Correct Answer: D. The patient's cognitive abilities

The nurse must consider the patient's cognitive abilities to understand drug instructions. If not, the nurse must find a family member or significant other to take on the responsibility of administering medications in the home setting. The patient's ability to recover, occupational hazards, and socioeconomic status do not affect drug administration.

- **Option A:** Many drugs can be administered orally as liquids, capsules, tablets, or chewable tablets. Because the oral route is the most convenient and usually the safest and least expensive, it is the one most often used. However, it has limitations because of the way a drug typically moves through the digestive tract.
- **Option B:** For drugs administered orally, absorption may begin in the mouth and stomach. However, most drugs are usually absorbed from the small intestine. The drug passes through the intestinal wall and travels to the liver before being transported via the bloodstream to its target site. The intestinal wall and liver chemically alter (metabolize) many drugs, decreasing the amount of drug reaching the bloodstream. Consequently, these drugs are often given in smaller doses when injected intravenously to produce the same effect.
- **Option C:** When a drug is taken orally, food and other drugs in the digestive tract may affect how much of and how fast the drug is absorbed. Thus, some drugs should be taken on an empty stomach, others should be taken with food, others should not be taken with certain other drugs, and still others cannot be taken orally at all.

61. When caring for a client with a diagnosis of schizotypal personality disorder, the nurse should:

- A. Set limits on manipulative behavior.
- B. Encourage participation in group therapy.
- C. Respect the client's needs for social isolation.
- D. Understand that seductive behavior is expected.

Correct Answer: C. Respect the client's needs for social isolation.

These clients are withdrawn, aloof, and socially distant; allowing distance and providing support may encourage the eventual development of a therapeutic alliance. Group therapy would increase this client's anxiety; cognitive or behavioral therapy would be more appropriate.

- **Option A:** In a respectful, neutral manner, explain expected client behaviors, limits, and responsibilities during sessions with nurse clinician. Clearly state the rules and regulations of the institution, and the consequences when these rules are not adhered to. From the beginning, clients need to have explicit guidelines and boundaries for expected behaviors on their part, as well as what the client can expect from the nurse. Clients need to be fully aware that they will be held responsible for their behaviors.
- **Option B:** Assess the need for and encourage skills training workshops. Skills training workshops offer the client wants to increase social skills through role-play and interactions with others who are learning similar skills. This often acts as a motivating factor where positive feedback and helpful suggestions are readily available.
- **Option D:** Intervene in manipulative behavior. All limits should be adhered to by all staff involved. Behaviors should be documented objectively (give times, dates, circumstances). Provide clear boundaries and consequences. The client will test limits, and, once they understand that the limits are solid, this understanding can motivate them to work on other ways to get their needs met. Hopefully, this will be done with the nurse clinician throughout problem-solving alternative behaviors and learning new effective communication skills.

62. You have a patient that is receiving peritoneal dialysis. What should you do when you notice the return fluid is slowly draining?

- A. Check for kinks in the outflow tubing.
- B. Raise the drainage bag above the level of the abdomen.
- C. Place the patient in a reverse Trendelenburg position.
- D. Ask the patient to cough.

Correct Answer: A. Check for kinks in the outflow tubing.

Tubing problems are a common cause of outflow difficulties, check the tubing for kinks and ensure that all clamps are open. Other measures include having the patient change positions (moving side to side or sitting up), applying gentle pressure over the abdomen, or having a bowel movement. Assess the patency of catheter, noting difficulty in draining. Note the presence of fibrin strings and plugs. Slowing of flow rate and presence of fibrin suggests partial catheter occlusion requiring further evaluation and intervention.

- **Option B:** Check tubing for kinks; note the placement of bottles and bags. Anchor catheter so that adequate inflow/outflow is achieved. Improper functioning of equipment may result in retained fluid in the abdomen and insufficient clearance of toxins.
- **Option C:** Turn from side to side, elevate the head of the bed, apply gentle pressure to the abdomen. May enhance outflow of fluid when the catheter is malpositioned and obstructed by the omentum.
- **Option D:** Monitor BP and pulse, noting hypertension, bounding pulses, neck vein distension, peripheral edema; measure CVP if available. Elevations indicate hypervolemia. Assess heart and breath sounds, noting S3 and crackles, rhonchi. Fluid overload may potentiate HF and pulmonary edema.

63. When performing nursing care for a neonate after birth, which intervention has the highest nursing priority?

- A. Obtain a dextrostix
- B. Give the initial bath
- C. Give the vitamin K injection
- D. Cover the neonates head with a cap

Correct Answer: D. Cover the neonate's head with a cap.

- **Option D:** Covering the neonate's head with a cap helps prevent cold stress due to excessive evaporative heat loss from the neonate's wet head.
- Option C: Vitamin K can be given up to 4 hours after birth.

64. You are the preceptor for an RN who is undergoing orientation to the intensive care unit. The RN is providing care for a patient with ARDS who has just been intubated in preparation for mechanical ventilation. You observe the nurse perform all of these actions. For which action must you intervene immediately?

- A. Assessing for bilateral breath sounds and symmetrical chest movements.
- B. Auscultating over the stomach to rule out esophageal intubation.
- C. Marking the tube 1 cm from where it touches the incisor tooth or nares.
- D. Ordering a chest radiograph to verify that tube placement is correct.

Correct Answer: C. Marking the tube 1 cm from where it touches the incisor tooth or nares

The endotracheal tube should be marked at the level where it touches the incisor tooth or nares. This mark is used to verify that the tube has not shifted. If the patient has an endotracheal tube, check for tube slippage into the right mainstem bronchus, as well as inadvertent extubation.

- **Option A:** Auscultate over the epigastrium to assess for the absence of sounds in the stomach. The presence of an enlarging abdomen or audible air inflation into the stomach with each positive-pressure ventilation may be the initial sign of an ET tube in the esophagus or an esophageal intubation.
- **Option B:** Since the advent of ET intubation, the use of physical examination methods has been the mainstay for the initial evaluation of proper ET tube placement. Direct visualization of the insertion of the ET tube through the vocal cords and into the trachea is the first method to confirm proper ET tube placement.
- **Option D:** A chest X-ray is often acquired following placement of an endotracheal tube (ET tube) to determine the position of its tip. The priority at this time is to verify that the tube has been correctly placed. The trachea, carina and main bronchi are almost always identifiable on a chest X-ray image, as long as the image is viewed on a high quality screen in a darkened room.

65. In order to prevent the development of tolerance, the nurse instructs the patient to:

- A. Apply the nitroglycerin patch every other day.
- B. Switch to sublingual nitroglycerin when the patient's systolic blood pressure elevates to >140 mm Hg.

- C. Apply the nitroglycerin patch for 14 hours each and remove for 10 hours at night.
- D. Use the nitroglycerin patch for acute episodes of angina only.

Correct Answer: C. Apply the nitroglycerin patch for 14 hours each and remove for 10 hours at night

Tolerance can be prevented by maintaining an 8- to 12-hour nitrate-free period each day. Intermittent transdermal nitroglycerin therapy is effective in the treatment of stable angina and prevents the development of tolerance. Previous investigations have suggested that removal of nitroglycerin patches may be associated with a decrease in anginal threshold.

- **Option A:** In patients with stable angina pectoris, intermittent transdermal nitroglycerin therapy is associated with a decrease in anginal threshold for 4 to 6 hours after patch removal. Although the cause of this phenomenon remains uncertain, it may be due to counterregulatory responses that develop during nitroglycerin patch application.
- **Option B:** It is given in hospitals as well as prescribed for outpatient use. Patients may be prescribed nitroglycerin to take as prophylaxis for anginal chest pain prior to an event that may provoke anginal symptoms. They must be instructed to allow the nitroglycerin to dissolve in their mouth and allow their oral mucosa to absorb the drug.
- **Option D:** Continuous treatment with transdermal nitroglycerin leads to tolerance development within the first day of application. Effective long-term therapy can be provided by interval treatment with nightly patch removal, but even during the hours of intermittent patch application there is rapid attenuation of initial effects.

66. You are a pediatric nurse caring for a 6-year-old child named Sophia who has been diagnosed with thalassemia major. Due to her condition, she requires regular blood transfusions which over time have led to iron overload. The physician has prescribed deferoxamine (Desferal) to manage her iron levels and mitigate the risks associated with iron overload. You administer the drug as per the prescription. A few hours later, you conduct a routine assessment to monitor her response to the medication and identify any potential side effects or adverse reactions that may warrant medical attention. In the process, you're looking out for any signs that may require notifying the physician. Which of the following observations, if made during your assessment, should alert you to notify the physician?

- A. Decreased hearing
- B. Hypertension
- C. Red urine
- D. Vomiting
- E. Diarrhea
- F. Increased salivation

Correct Answer: A. Decreased hearing

Deferoxamine has been associated with ototoxicity which can lead to hearing loss. If the nurse observes or the child reports decreased hearing, the physician should be notified immediately as this could be indicative of ototoxicity which might require dosage adjustment or discontinuation of

deferoxamine.

- **Option B:** Hypertension is not a common side effect of deferoxamine. However, any significant deviation in blood pressure should be monitored and reported to the physician for further evaluation.
- **Option C:** Red urine can occur with deferoxamine therapy as the drug binds to iron and is excreted via the urine. This may not be a concerning symptom as it is an expected effect of the medication.
- **Option D:** While vomiting may occur as a side effect, it is not as severe or immediate a concern as ototoxicity. However, persistent vomiting should be reported to the physician.
- **Option E:** Diarrhea might occur as a side effect, but it is not as severe or immediate a concern as ototoxicity. Persistent diarrhea should still be reported to the physician.
- **Option F:** Increased salivation is not a common or severe side effect associated with deferoxamine. However, any new or unusual symptoms should be monitored and reported.

67. Which of the following diabetes drugs acts by decreasing the amount of glucose produced by the liver?

- A. Alpha-glucosidase inhibitors
- B. Biguanides
- C. Meglitinides
- D. Sulfonylureas

Correct Answer: B. Biguanides

Biguanides, such as metformin, lower blood glucose by reducing the amount of glucose produced by the liver. Metformin is a biguanide drug that reduces blood glucose levels by decreasing glucose production in the liver, decreasing intestinal absorption, and increasing insulin sensitivity.

- **Option A:** Alpha-glucosidase inhibitors block the breakdown of starches and some sugars, which helps to reduce blood glucose levels. Alpha-glucosidase inhibitors competitively inhibit alpha-glucosidase enzymes in the intestinal brush border cells that digest the dietary starch, thus inhibiting the polysaccharide reabsorption and the metabolism of sucrose to glucose and fructose.
- **Option C:** Meglitinides exert their effects via different pancreatic beta-cell receptors, but they act similarly to sulfonylureas by regulating adenosine triphosphate-sensitive potassium channels in pancreatic beta cells, thereby causing an increase in insulin secretion.
- **Option D:** Sulfonylureas bind to adenosine triphosphate-sensitive potassium channels (K-ATP channels) in the beta cells of the pancreas; this leads to the inhibition of those channels and alters the resting membrane potential of the cell, causing an influx of calcium and the stimulation of insulin secretion.

68. A client is receiving a transfusion of one unit of cryoprecipitate. The nurse will review which of the following laboratory studies to assess the effectiveness of the therapy?

- A. Serum electrolytes
- B. White blood cell count

C. Coagulation studies

D. Hematocrit count

Correct Answer: C. Coagulation studies

The evaluation of the effective response of a cryoprecipitate transfusion is assessed by monitoring coagulation studies and fibrinogen levels. Cryoprecipitate Antihemophilic Factor, also called cryo, is a portion of plasma, the liquid part of the blood. Cryo is rich in clotting factors, which are proteins that can reduce blood loss by helping to slow or stop bleeding.

- **Option A:** Crystalloids are the fluids of choice for most minor procedures. They are sterile aqueous solutions that may contain glucose, various electrolytes, organic salts, and nonionic compounds. Some examples of these solutes are sodium chloride, potassium chloride, sodium bicarbonate, calcium carbonate, sodium acetate, sodium lactate, and sodium gluconate.
- **Option B:** White blood cells are transfused to treat life-threatening infections in people who have a greatly reduced number of white blood cells or whose white blood cells are functioning abnormally. The use of white blood cell transfusions is rare because improved antibiotics and the use of cytokine growth factors that stimulate people to produce more of their own white blood cells have greatly reduced the need for such transfusions.
- **Option D:** The average increase in hematocrit per liter of packed red blood cells transfused was 6.4% +/- 4.1%. If 1 "unit" of packed red blood cells is approximately 300 mL, this becomes a change of hematocrit of 1.9% +/- 1.2% per "unit" of blood. The accepted correlation of about 1 "unit" of blood loss per 3% change in hematocrit would be valid for a 500-cc unit, but a typical unit of packed red blood cells is typically 300 cc.

69. When developing an initial nursing care plan for a male client with a Bipolar I disorder (manic episode) nurse Ron should plan to?

A. Isolate his gym time.

B. Encourage his active participation in unit programs.

C. Provide foods, fluids, and rest.

D. Discourage his participation in programs.

Correct Answer: C. Provide foods, fluids, and rest

The client in a manic episode of the illness often neglects basic needs, these needs are a priority to ensure adequate nutrition, fluid, and rest. Decreasing environmental stimulation may assist the client to relax; the nurse must provide a quiet environment without noise, television, and other distractions; finger foods or things the client can eat while moving around are the best options to improve nutrition.

- **Option A:** A primary nursing responsibility is to provide a safe environment for the client and others; for clients who feel out of control, the nurse must establish external controls emphatically and nonjudgmentally. The nurse can direct their need for movement into socially acceptable, large motor activities such as arranging chairs for a community meeting or walking.
- **Option B:** When less manic, the client might join one or two other clients in quiet, non stimulating activities (e.g., drawing, board games, cards). As mania subsides, involvement in activities that provide a focus and social contact becomes more appropriate. Competitive games can stimulate aggression and can increase psychomotor activity. When possible, provide an environment with minimum stimuli (e.g., quiet, soft music, dim lighting). Reduction in stimuli lessens distractibility.

- **Option D:** Solitary activities requiring short attention spans with mild physical exertion are best initially (e.g., writing, taking photos, painting, or walks with staff). Solitary activities minimize stimuli; mild physical activities release tension constructively.

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

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

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

The nurse always should clean around a wound drain, moving from center outward in ever-larger circles, because the skin near the drain site is more contaminated than the site itself. A Jackson-Pratt (JP) drain is used to remove fluids that build up in an area of the body after surgery. The JP drain is a bulb-shaped device connected to a tube. One end of the tube is placed inside the client during surgery. The other end comes out through a small cut in the skin. The bulb is connected to this end. The client may have a stitch to hold the tube in place.

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

71. A male client is having tonic-clonic seizures. What should the nurse do first?

- A. Elevate the head of the bed.
- B. Restrain the client's arms and legs.
- C. Place a tongue blade in the client's mouth.
- D. Take measures to prevent injury.

Correct Answer: D. Take measures to prevent injury.

Protecting the client from injury is the immediate priority during a seizure. Do not leave the patient during and after a seizure to promote safety measures. Maintain in lying position, flat surface; turn head to side during seizure activity. Helps in the drainage of secretions; prevents the tongue from obstructing the airway. Loosen clothing from neck or chest and abdominal areas to aid in breathing or chest expansion.

- **Option A:** Elevating the head of the bed would have no effect on the client's condition or safety. Support the head, place on soft areas or assist to the floor if out of bed. Supporting the extremities lessens the risk of physical injury when the patient lacks voluntary muscle control.

- **Option B:** Restraining the client's arms and legs could cause injury. Do not attempt to restrain. If the attempt is made to restrain the patient during a seizure, erratic movements may increase, and the patient may injure himself or others.
- **Option C:** Placing a tongue blade or other object in the client's mouth could damage the teeth. Turn head to side and suction airway as indicated. Insert plastic bite blocks only if the jaw relaxed. Helps maintain airway patency and reduces the risk of oral trauma but should not be "forced" or inserted when teeth are clenched because dental and soft-tissue damage may result. Note: Wooden tongue blades should not be used because they may splinter and break in the patient's mouth.

72. Three days after a burn injury, the client develops a temperature of 100° F, a white blood cell count of 15,000/mm³, and a white, foul-smelling discharge from the wound. The nurse recognizes that the client is most likely exhibiting symptoms of which condition?

- A. Acute phase of the injury
- B. Autodigestion of collagen
- C. Granulation of burned tissue
- D. Wound infection

Correct Answer: D. Wound infection

Color change, purulent, foul-smelling drainage, increased white blood cell count, and fever could all indicate infection. Indicators of sepsis (often occurs with full-thickness burn) requiring prompt evaluation and intervention. Changes in sensorium, bowel habits, and the respiratory rate usually precede fever and alteration of laboratory studies.

- **Option A:** These symptoms will not be seen in the acute phase of the injury. Assess and document size, color, depth of wound, noting necrotic tissue and condition of the surrounding skin.
- **Option B:** Autodigestion of collagen will not increase the body temperature or cause foul-smelling wound discharge. Monitor vital signs for fever, increased respiratory rate and depth in association with changes in sensorium, presence of diarrhea, decreased platelet count, and hyperglycemia with glycosuria.
- **Option C:** Granulation of tissue will not increase the body temperature or cause foul-smelling wound discharge. Examine wounds daily, note and document changes in appearance, odor, or quantity of drainage.

73. The client with a colostomy has an order for irrigation of the colostomy. The nurse used which solution for irrigation?A. Distilled water

- A. Distilled water
- B. Tap water
- C. Sterile water
- D. Lactated Ringer's

Correct Answer: B. Tap water

Warm tap water or saline solution is used to irrigate a colostomy. If tap water is not suitable for drinking, then bottled water should be used. The prescribed irrigating solution is usually 500-1000cc warm (100°–105°F) tap water. Fill the irrigation bag with the prescribed solution and hang it on the IV pole or hook.

- **Option A:** Distilled water is not used for irrigation. When performed safely and correctly, CI is an excellent method to regulate the evacuation of stool from the ostomy in a selected population of patients with an end colostomy and has rarely been associated with complications. It may also help to improve quality of life
- **Option C:** Sterile water is not used for irrigation. Using water that is too warm or too cool, or instilling water too quickly, may cause abdominal cramps or a vasovagal response.⁶ Therefore, it is important to provide careful written and oral instructions to the patient. In addition, the first irrigation should be performed in the presence of a health care professional because a small number of patients may experience dizziness as a result of a fall in blood pressure or pulse rate.
- **Option D:** Lactated Ringer's are not used for irrigation. Irrigations for colostomies involve the regular installation of moderate to large volumes of water to clear the colon of stool. Essentially, it is an enema into the stoma resulting in the clearing of stool from the colon. Some individuals who have colostomies choose to use irrigations as a means to regulate the function of their stoma.

74. Patrick is treated in the emergency department for a Colles' fracture sustained during a fall. What is a Colles' fracture?

- A. Fracture of the distal radius.
- B. Fracture of the olecranon.
- C. Fracture of the humerus.
- D. Fracture of the carpal scaphoid.

Correct Answer: A. Fracture of the distal radius.

Colles' fracture is a fracture of the distal radius, such as from a fall on an outstretched hand. It's most common in women.

- **Option B:** Colles' fracture does not involve the olecranon. Most Colles fractures are secondary to a fall on an outstretched hand with a pronated forearm in dorsiflexion.
- **Option C:** The humerus is not affected in Colles' fracture. It is a complete fracture of the radius bone of the forearm close to the wrist resulting in an upward displacement of the radius and obvious deformity.
- **Option D:** Colles' fracture doesn't refer to a fracture of the carpal scaphoid. A scaphoid fracture is a break in one of the small bones of the wrist.

75. Which finding indicates to the nurse that the client understands the psychosocial impact of his severe burn injury?

- A. "It is normal to feel depressed."
- B. "I will be able to go back to work immediately."
- C. "I will not feel anger about my situation."
- D. "Once I get home, things will be normal."

Correct Answer: A. "It is normal to feel depressed."

During the recovery period, and for some time after discharge from the hospital, clients with severe burn injuries are likely to have psychological problems that require intervention. Depression is one of these problems.

- **Option B:** Assist the patient and the family to express their feelings of grief and guilt. The patient and the family may initially be most concerned about the patient's death and/or feel guilty, believing that in some way they could have prevented the incident.
- **Option C:** Acknowledge and accept the expression of feelings of frustration, dependency, anger, grief, and hostility. Note withdrawn behavior and use of denial. Acceptance of these feelings as a normal response to what has occurred facilitates resolution. It is not helpful or possible to push the patient before ready to deal with the situation.
- **Option D:** Assist the patient to identify the extent of actual change in appearance and body function. Feelings of grief, loss, anxiety, anger, fear, and guilt are all normal feelings that can occur. Clients need to know that problems of physical care and psychological stresses may be overwhelming.

76. Which of the following procedures or assessments must the nurse perform when preparing a client for eye surgery?

- A. Clipping the client's eyelashes.
- B. Verifying the affected eye has been patched 24 hours before surgery.
- C. Verifying the client has been NPO since midnight, or at least 8 hours before surgery.
- D. Obtaining informed consent with the client's signature and placing the forms on the chart.

Correct Answer: C. Verifying the client has been NPO since midnight, or at least 8 hours before surgery.

Maintaining NPO status for at least 8 hours before surgical procedures prevents vomiting and aspiration. Historically, general anesthesia and retrobulbar blocks were used for intracapsular cataract surgery. However, with the advent of phacoemulsification and small incision surgeries, clinicians have since moved to local and topical anesthesia.

- **Option A:** There is no need to clip the eyelashes unless specifically ordered by the physician. The ophthalmologic evaluation includes a thorough ophthalmic history, with a focus on visual acuity as well as comorbidities, and slit-lamp examination. Several measurements of the eye are then taken, including the anterior chamber depth, to determine intraocular lens refraction.
- **Option B:** There is no need to patch an eye before most surgeries unless specifically ordered by the physician. While thorough medical history should be taken before surgery, routine systemic preoperative tests do not need to be ordered. Some institutions may require clearance from the primary care physician when patients have underlying systemic diseases.
- **Option D:** The physician is responsible for obtaining informed consent; the nurse validates that the consent is obtained. With newer and well-developed techniques, cataract surgery is one of the most successful clinical managements in medicine with direct improvements in visual acuity as well as large improvements in activities of daily living and decreased mortality.

77. A female client went to the clinic with a creatinine clearance of 200 mL/min. Which of the following conditions of the client can cause the increased level of

this test?

- A. Renal disease.
- B. Dehydration.
- C. Congestive heart failure.
- D. History of high dietary protein intake.

Correct Answer: D. History of high dietary protein intake.

The normal creatinine clearance for a female is 88 to 128 ml/min. An increased creatinine clearance is often referred to as hyperfiltration and is most commonly seen during pregnancy or in clients with a large dietary protein intake. Dietary protein consumption increases serum creatinine level through protein catabolism rather than decreased clearance. Hence, serum creatinine may be less reliable for estimating GFR or estimating a glomerular hyperfiltration response in studies that manipulate dietary protein.

- **Option A:** Creatinine clearance has been used for many decades to estimate GFR. It involves a 24-hour urine collection to measure creatinine excretion. As the same sample can be used to measure the protein excretion rate, creatinine clearance is often used for the initial evaluation of renal diseases, such as glomerulonephritis.
- **Option B:** Dehydration generally causes BUN levels to rise more than creatinine levels. This causes a high BUN-to-creatinine ratio. Kidney disease or blocked urine flow from the kidney causes both BUN and creatinine levels to rise.
- **Option C:** Congestive heart failure is seen with a decreased creatinine clearance. Low creatinine clearance levels can mean the client has chronic kidney disease or serious kidney damage. Kidney damage can be from conditions such as a life-threatening infection, shock, cancer, low blood flow to the kidneys, or urinary tract blockage. Other conditions, such as heart failure and dehydration, can also cause low clearance levels.

78. A nurse provides instructions to a client taking fluoxetine (Prozac) a selective serotonin reuptake inhibitor (SSRI) antidepressant. The nurse tells the client to take the medication:

- A. Early in the morning
- B. During lunch time
- C. At snack time
- D. At bedtime

Correct Answer: A. Early in the morning

Fluoxetine is used to treat major depressive disorder, bulimia nervosa obsessive-compulsive disorder, panic disorder, and premenstrual dysphoric disorder (PMDD). It is taken early in the morning to prevent interference with sleep.

79. A mother of a 14-year-old client receiving chemotherapy for leukemia calls out to the unit concerning her other child having chickenpox. Which of these actions will the nurse anticipate taking next?

- A. Plan to admit the client to a private room in the hospital.
- B. Teach the mother about contact and airborne precautions.
- C. Educate the mother about the correct use of acyclovir (Zovirax).
- D. Administer varicella-zoster immune globulin to the client.

Correct Answer: D. Administer varicella-zoster immune globulin to the client

The development of varicella in high-risk clients can be prevented via administration of varicella-zoster immune globulin prescribed by the physician. Varicella zoster immunoglobulin (VZIG) is a scarce blood product that is offered to individuals at high risk of severe chickenpox following an exposure.

- **Option A:** Hospitalization may be required if the child develops a varicella-zoster virus infection. The incidence of varicella was higher in children with leukemia or lymphoma than in children with other types of cancer. Virus reactivation was uncommon and had a benign course. Varicella mortality in these children could be favorably modified through an active immunization of immunocompetent children.
- **Option B:** Contact and airborne precautions will be implemented to prevent the spread of infection to other children if the child develops varicella. Contact Precautions only if Herpes simplex, localized zoster in an immunocompetent host or vaccinia viruses most likely.
- **Option C:** Acyclovir is a medication used in the management and treatment of infections caused by the herpes simplex virus (HSV). It is FDA approved to treat genital herpes and HSV encephalitis. Some off-label uses include cold sores, shingles, and chickenpox. It is in the antiviral class of medications.

80. 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.

81. A 19-year-old patient comes to the ED with acute asthma. His respiratory rate is 44 breaths/minute, and he appears to be in acute respiratory distress. Which of the following actions should you take first?

- A. Take a full medical history.
- B. Give a bronchodilator by nebulizer.
- C. Apply a cardiac monitor to the patient.
- D. Provide emotional support for the patient.

Correct Answer: B. Give a bronchodilator by nebulizer.

The patient having an acute asthma attack needs more oxygen delivered to his lungs and body. Nebulized bronchodilators open airways and increase the amount of oxygen delivered.

- **Options A and D:** Important but not a priority as of the moment; emotional support can help calm the patient but can be done after medical intervention.
- **Option C:** The patient may not need cardiac monitoring because he's only 19 years old unless he has a medical history of cardiac problems.

82. A Chinese-American client experiencing cough with clear white phlegm, which is believed to be a yin disorder, is likely to treat it with:

- A. Foods considered being yin.
- B. Foods considered being yang.
- C. Aromatherapy.
- D. Touch therapy.

Correct Answer: B. Foods considered to be yang.

In the yin and yang theory, health is believed to exist when all aspects of the person are in perfect balance. Yin foods are cold and yang foods are hot. One eats cold foods when hot has a hot illness and one eats hot foods when one has a cold illness.

- **Option A:** Foods considered yin include dark leafy greens like spinach, lotus root, radish, dandelion greens, cucumbers, bamboo shoots, seaweed, watermelon, green tea, chamomile tea, mint tea, clams, crab, and tofu.
- **Option C:** Aromatherapy is a holistic healing treatment that uses natural plant extracts to promote health and well-being. Sometimes it's called essential oil therapy. Aromatherapy uses aromatic essential oils medicinally to improve the health of the body, mind, and spirit. It enhances both physical and emotional health.
- **Option D:** In touch therapy, practitioners use their hands to manipulate and direct the flow of energy — known as the biofield — throughout the body in order to promote healing and restore the body's ability to heal itself.

83. When assessing the newborn's heart rate, which of the following ranges would be considered normal if the newborn were sleeping?

- A. 80 beats per minute
- B. 100 beats per minute
- C. 120 beats per minute
- D. 140 beats per minute

Correct Answer: B. 100 beats per minute

The normal heart rate for a newborn that is sleeping is approximately 100 beats per minute. If the newborn was awake, the normal heart rate would range from 120 to 160 beats per minute.

- **Option A:** 80 beats per minute is below the normal range of a newborn's heart rate. Neonatal bradycardia is defined as a decrease in heart by 30 bpm from baseline. Regarding neonatal resuscitation, bradycardia is concerning when the heart rate is less than 100 bpm. The primary cause of neonatal bradycardia is hypoxia. Other causes of bradycardia in this age group include hypothermia, hypovolemia, and pneumothorax, head injury, and medications.
- **Option C:** Newborns 0 to 1 month old has a normal range of 70 to 190 beats per minute
- **Option D:** 140 beats per minute is still within the normal range of a newborn's heart rate.

84. Which patient should be assigned to the traveling nurse, new to neurologic nursing care, who has been in the neurologic unit for 1 week?

- A. A 34-year-old patient newly diagnosed with multiple sclerosis (MS).
- B. A 68-year-old patient with chronic amyotrophic lateral sclerosis (ALS).
- C. A 56-year-old patient with Guillain-Barre syndrome (GBS) in respiratory distress.
- D. A 25-year-old patient admitted with C4 level spinal cord injury (SCI).

Correct Answer: B. A 68-year-old patient with chronic amyotrophic lateral sclerosis (ALS)

The traveling nurse is relatively new to neurologic nursing and should be assigned to patients whose conditions are stable and not complex.

- **Option A:** The newly diagnosed patient will need to be transferred to the ICU. Multiple sclerosis (MS) is an immune-mediated inflammatory disease that attacks myelinated axons in the central nervous system, destroying the myelin and the axon in variable degrees and producing significant physical disability within 20–25 years in more than 30% of patients. The hallmark of MS is symptomatic episodes that occur months or years apart and affect different anatomic locations.
- **Option C:** The patient with GBS is in respiratory distress and should be assigned to an experienced neurological nurse. Guillain-Barré syndrome (GBS) is a rare disorder in which a person's own immune system damages their nerve cells, causing muscle weakness and sometimes paralysis. GBS can cause symptoms that usually last for a few weeks.
- **Option D:** The patient with C4 SCI is at risk for respiratory arrest. A C4 spinal cord injury occurs when damage is dealt about mid-way down the cervical spinal cord — the topmost portion of the spinal cord that is located in the neck and upper shoulders.

85. During shift report, the nurse learns that an older female client is unable to maintain continence after she senses the urge to void and becomes incontinent on the way to the bathroom. Which nursing diagnosis is most appropriate?

- A. Stress urinary incontinence
- B. Reflex urinary incontinence
- C. Functional urinary incontinence
- D. Urge urinary incontinence

Correct Answer: D. Urge urinary incontinence

The key phrase is “the urge to void” option one occurs when the client coughs, sneezes, or jars the body, resulting in accidental loss of urine. If one feels a strong urge to urinate even when the bladder isn’t full, the incontinence might be related to overactive bladder, sometimes called urge incontinence. This condition occurs in both men and women and involves an overwhelming urge to urinate immediately, frequently followed by loss of urine before the client can reach a bathroom. Even if one never has an accident, urgency and urinary frequency can interfere with work and a social life because of the need to keep running to the bathroom.

- **Option A:** Stress Urinary Incontinence (SUI) is when urine leaks out with sudden pressure on the bladder and urethra, causing the sphincter muscles to open briefly. With mild SUI, pressure may be from sudden forceful activities, like exercise, sneezing, laughing, or coughing.
- **Option B:** Reflex urinary incontinence occurs with involuntary loss of urine at somewhat predictable intervals when a specific bladder volume is reached. Reflex incontinence occurs when the bladder muscle contracts and urine leaks (often in large amounts) without any warning or urge. This can happen as a result of damage to the nerves that normally warn the brain that the bladder is filling.
- **Option C:** Functional urinary continence is the involuntary loss of urine related to impaired function. If the urinary tract is functioning properly but other illnesses or disabilities are preventing one from staying dry, the client might have what is known as functional incontinence. For example, if an illness rendered the client unaware or unconcerned about the need to find a toilet, the client would become incontinent. Medications, dementia, or mental illness can decrease awareness of the need to find a toilet.