Kevin's Review - 100 NCLEX Practice Questions

1. Which client factors should alert the nurse to potential increased complications with a burn injury?

A. The client is a 26-year-old male.

B. The client has had a burn injury in the past.

C. The burned areas include the hands and perineum.

D. The burn took place in an open field and ignited the client's clothing.

Correct Answer: C. The burned areas include the hands and perineum.

Burns of the perineum increase the risk for sepsis. Burns of the hands require special attention to ensure the best functional outcome. Complications are related to the extension of the burn. Burns to the genitalia and perineum are severe conditions that all urologists should be familiar with and know how to manage. Fluid resuscitation is the initial step in treating these patients and is followed by topical dressings in the case of superficial burns.

- **Option A:** Irrespective of the type of burn injury, the aged population shows slower recoveries and suffers more complications. Age-associated immune dysfunction, immunosenescence, may predispose the elderly burn patients to more infections, slower healing, and/or to other complications.
- **Option B:** Accordingly, patients with burn injury cannot be considered recovered when the wounds have healed; instead, burn injury leads to long-term profound alterations that must be addressed to optimize quality of life.
- **Option D:** Burns to the genitals correspond to approximately 2% of all burn patients in North American case series. The majority of those cases are associated with greater burned body surface areas, in which direct fire and scalding are the most frequent causes. Burn management begins with opportune diagnosis and entails making the correct classification, depending on the depth of the lesion.

2. Which of the following interventions would be most appropriate for preventing the development of a paralytic ileus in a client who has undergone renal surgery?

A. Encourage the client to ambulate every 2 to 4 hours.

B. Offer 3 to 4 ounces of a carbonated beverage periodically.

C. Encourage use of a stool softener.

D. Continue intravenous fluid therapy.

Correct Answer: A. Encourage the client to ambulate every two (2) to four (4) hours.

Ambulation stimulates peristalsis. A client with paralytic ileus is kept NPO until peristalsis returns. Encouraging ambulation very early in the postoperative period is a simple but very important prevention and treatment measure. Regular and serial clinical assessments should be exerted with open eyes and mind for worsening complications or a missed diagnosis.

- **Option B:** Management of postoperative ileus revolves around supportive care. After excluding serious or treatable conditions, supportive treatment and optimizing care almost always resolve the ileus. These measures include intravenous fluid replacement, electrolyte replacement, early ambulation, and often nasogastric tube placement.

- **Option C:** A stool softener will not stimulate peristalsis. Multiple studies have assessed a few treatment measures to overcome ileus but with no clinically significant outcomes. Studies on gum-chewing showed some improvement in the ileus. Therefore, this is occasionally but not widely used in clinical practice.
- **Option D:** Intravenous fluid infusion is a routine postoperative order that does not have any effect on preventing paralytic ileus. A careful balance between postoperative pain control and analgesics, especially opiates use, is crucial to prevent or treat the ileus. Non-opiate analgesics are encouraged. Optimizing electrolytes and other metabolites are important.

3. Which of the following should the nurse do first after noting that a child with Hirschsprung disease has a fever and watery explosive diarrhea?

A. Notify the physician immediately.

B. Administer antidiarrheal medications.

C. Monitor child every 30 minutes.

D. Nothing, this is characteristic of Hirschsprung disease.

Correct Answer: A. Notify the physician immediately.

For the child with Hirschsprung disease, fever and explosive diarrhea indicate enterocolitis, a life-threatening situation. Therefore, the physician should be notified immediately.

- **Option B:** Generally, because of the intestinal obstruction and inadequate propulsive intestinal movement, antidiarrheals are not used to treat Hirschsprung disease.
- **Option C:** The child is acutely ill and requires intervention, with monitoring more frequently than every 30 minutes.
- **Option D:** Hirschsprung disease typically presents with chronic constipation. Hirschsprung's disease (congenital megacolon) is caused by the failed migration of colonic ganglion cells during gestation. Varying lengths of the distal colon are unable to relax, causing functional colonic obstruction.

4. Your patient has a retractable gastric peptic ulcer and has had a gastric vagotomy. Which factor increases as a result of vagotomy?

A. Peristalsis

B. Gastric acidity

C. Gastric motility

D. Gastric pH

Correct Answer: D. Gastric pH

If the vagus nerve is cut as it enters the stomach, gastric acid secretion is decreased, but intestinal motility is also decreased and gastric emptying is delayed. Because gastric acids are decreased, gastric pH increases. The postoperative complications of truncal vagotomy are well documented. Resection of the vagal nerve trunks above the celiac and hepatic branches (differentiates TV versus SV) leads to parasympathetic denervation of the pylorus, liver, biliary tree, pancreas, and small and large intestines.

- **Option A:** The stomach loses the vagally mediated receptive relaxation. This leads to an increased intragastric pressure causing an increased emptying of liquids. The pylorus does not relax effectively, and a decrease in solid food emptying is seen.
- **Option B:** Gastrin is secreted by the G cells that are mainly located in the stomach antrum and pylorus. Acetylcholine is released in response to parasympathetic stimulation, which travels in the fibers of the vagus nerves. Histamine is released by the enterochromaffin-like cells.
- **Option C:** Gastric phase begins once food enters the stomach. It is stimulated by proximal stomach distension (vagally mediated). It is absent in patients with a vagotomy. The gastric phase is stimulated by amino acids and peptides, leading to G cell activation. It accounts for 60% of total acid production.

5. Nurse Jen is caring for a male client with manic depression. The plan of care for a client in a manic state would include:

A. Offering high-calorie meals and strongly encouraging the client to finish all food.

B. Insisting that the client remain active through the day so that he'll sleep at night.

C. Allowing the client to exhibit hyperactive, demanding, manipulative behavior without setting limits.

D. Listening attentively with a neutral attitude and avoiding power struggles.

Correct Answer: D. Listening attentively with a neutral attitude and avoiding power struggles.

The nurse should listen to the client's requests, express willingness to seriously consider the request, and respond later. The nurse shouldn't try to restrain the client when he feels the need to move around as long as his activity isn't harmful. Remain neutral as possible; Do not argue with the client. The client can use inconsistencies and value judgments as justification for arguing and escalating mania. Maintain a consistent approach, employ consistent expectations, and provide a structured environment. Clear and consistent limits and expectations minimize the potential for client's manipulation of staff.

- **Option A:** High-calorie finger foods should be offered to supplement the client's diet, if he can't remain seated long enough to eat a complete meal. The nurse shouldn't be forced to stay seated at the table to finish a meal. Provide frequent high-calorie fluids (e.g., fruit shake, milk). Prevents the risk of serious dehydration.
- **Option B:** The nurse should encourage the client to take short daytime naps because he expends so much energy. Provide frequent rest periods to prevent exhaustion. Maintain a low level of stimuli in the client's environment (e.g., loud noises, bright light, low-temperature ventilation). Helps minimize the escalation of anxiety.
- **Option C:** The nurse should set limits in a calm, clear, and self-confident tone of voice. Use a calm and firm approach. Provides structure and control for a client who is out of control. Use short, simple, and brief explanations or statements. A short attention span limits understanding to small pieces of information. Redirect agitation and potentially violent behaviors with physical outlets in an area of low stimulation (e.g., punching bag). Can help to relieve pent-up hostility and relieve muscle tension.

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

A. A 35-year-old patient admitted three hours ago for a gunshot wound, with a 1.5 cm area of dark drainage noted on the dressing.

B. A 43-year-old patient who underwent a mastectomy two days ago, with 23 ml of serosanguinous fluid in the Jackson-Pratt drain.

C. A 59-year-old patient with a history of a collapsed lung from an accident, with no drainage noted in the chest tube in the past eight hours.

E. A 54-year-old patient with a total knee replacement two days ago, with moderate swelling at the surgical site.

E. A 47-year-old patient who had a laparoscopic cholecystectomy yesterday, complaining of mild pain at the incision site.

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

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

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

7. A newly hired charge nurse assesses the staff nurses as competent individually but ineffective and unproductive as a team. In addressing her concern, the charge nurse should understand that the usual reason for such a situation is:

A. Unhappiness about the charge in leadership.

B. Unexpected feelings and emotions among the staff.

C. Fatigue from overwork and understaffing.

D. Failure to incorporate staff in decision making.

Correct Answer: B. Unexpected feelings and emotions among the staff.

The usual or most prevalent reason for lack of productivity in a group of competent nurses is inadequate communication or a situation in which the nurses have unexpected feelings and emotions. Although the other options could be contributing to the problematic situation, they're less likely to be the cause.

- **Option A:** Providing employees with acknowledgment of the good work that they have done is one of the easiest management tasks. However, it is also as easily neglected. For instance, a study in the financial sector shows that only 20% of employees feel strongly valued at work.
- **Option C:** Another big issue that causes low productivity is workplace stress. A study by Health Advocate shows that there are about one million employees who are suffering from low productivity due to stress, which costs companies $600 dollars per worker every single year.
- **Option D:** An important reason for low employee productivity might be the fact that they do not feel that they belong with the company that they are part of. It is important for every manager to make sure that the environment in their business is welcoming to new hires and does not make them feel underappreciated.

8. While explaining an illness to a 10-year-old, what should the nurse keep in mind about the cognitive development at this age?

A. They are able to make simple associations of ideas.

B. They are able to think logically in organizing facts.

C. Interpretation of events originates from their own perspective.

D. Conclusions are based on previous experiences.

Correct Answer: B. They are able to think logically in organizing facts.

The child in the concrete operational stage, according to Piaget, is capable of mature thought when allowed to manipulate and organize objects.

- **Option A:** Option A describes the preoperational stage. During this stage, young children can think about things symbolically. The preoperational stage is the second stage in Piaget's theory of cognitive development. This stage begins around age 2, as children start to talk, and lasts until approximately age 7. 1 During this stage, children begin to engage in symbolic play and learn to manipulate symbols.
- **Option C:** In the formal operational stage, people develop the ability to think about abstract concepts, and logically test hypotheses.
- **Option D:** Option D describes the formal operational stage. The formal operational stage begins at approximately age twelve and lasts into adulthood. As adolescents enter this stage, they gain the ability to think in an abstract manner by manipulating ideas in their head, without any dependence on concrete manipulation.

9. A 31-year-old multipara is admitted to the birthing room after initial examination reveals her cervix to be at 8 cm, completely effaced (100 %), and at 0 station. What phase of labor is she in?

A. Active phase

B. Latent phase

C. Expulsive phase

D. Transitional phase

Correct Answer: D. Transitional phase

The transitional phase of labor extends from 8 to 10 cm; it is the shortest but most difficult and intense for the patient.

- **Option A:** The active phase extends from 4 to 7 cm; it is moderate for the patient.
- **Option B:** The latent phase extends from 0 to 3 cm; it is mild in nature.
- **Option C:** The expulsive phase begins immediately after the birth and ends with separation and expulsion of the placenta.

10. 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 cardiolite) 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.

11. In renal regulation of water balance, the functions of angiotensin II include:

A. Blood clotting within the nephron.

B. Increasing progesterone secretion into the renal tubules.

C. Catalyzing calcium-rich nutrients.

D. Selectively constricting portions of the arteriole in the nephron.

Correct Answer: D. Selectively constricting portions of the arteriole in the nephron.

As part of the renal regulation of water balance, angiotensin II selectively constricts portions of the arteriole in the nephron. ATII is a potent vasopressor, acting on vascular endothelial receptors. The two types of ATII receptors present in the heart and vascular smooth muscle that are responsible for signal transduction in mediating the vasoconstrictive action of ATII are the AT1 and AT2 receptors.

- **Option A:** The kidney regulates plasma osmolarity by modulating the amount of water, solutes, and electrolytes in the blood. It ensures long term acid-base balance and also produces erythropoietin which stimulates the production of red blood cells. It also produces renin for blood pressure regulation and carries out the conversion of vitamin D to its active form.
- **Option B:** In the normal circumstance, the PCT reabsorbs all the glucose and amino acids as well as 65% of Na and water. The PCT reabsorb sodium ions by primary active transport via a basolateral Na-K pump. It reabsorbs glucose, amino acids, and vitamins through secondary active transport with Na and an electrochemical gradient drives passive paracellular diffusion.

- **Option C:** The next tubular segment for reabsorption is the distal convoluted tubule (DCT). There is a primary active sodium transport at the basolateral membrane and secondary active transport at the apical membrane through Na-Cl symporter and channels. This process is aldosterone regulated at the distal portion. There is also calcium reabsorption via passive uptake controlled by the parathyroid hormone.

12. Magnesium reabsorption is controlled by:

A. Loop of Henle

B. Glomerulus

C. Pituitary

D. Parathyroid hormone

Correct Answer: A. Loop of Henle

The Loop of Henle is responsible for magnesium reabsorption. The loop of Henle appears to be the major nephron site where magnesium reabsorption is controlled. The principal factors which alter magnesium reabsorption in the loop include parathyroid hormone, changes in plasma magnesium and calcium concentration and loop diuretics.

- **Option B:** The glomerulus, in contrast to the majority of other capillary beds, sits between two arterioles; receiving blood supply from the upstream afferent arteriole, and blood exiting downstream via the efferent arterioles (E for exit).
- **Option C:** The pituitary endocrine gland, which is located in the bony sella turcica, is attached to the base of the brain and has a unique connection with the hypothalamus. The pituitary gland consists of two anatomically and functionally distinct regions, the anterior lobe (adenohypophysis) and the posterior lobe (neurohypophysis). Between these lobes lies a small region called the intermediate lobe. The hypothalamus regulates the pituitary gland secretion
- **Option D:** The parathyroid gland secretes parathyroid hormone (PTH), a polypeptide, in response to low calcium levels detected in the blood. PTH facilitates the synthesis of active vitamin D, calcitriol (1,25-dihydroxycholecalciferol, or vitamin D3) in the kidneys. In conjunction with calcitriol, PTH regulates calcium and phosphate.

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

A. Have a mammogram annually

B. Perform breast self-examination annually

C. Have a hormonal receptor assay annually

D. Have a physician conduct a clinical examination every 2 years

Correct Answer: A. Have a mammogram annually

- **Option A:** The American Cancer Society guidelines state, “Women older than age 40 should have a mammogram annually and a clinical examination at least annually [not every 2 years].

- **Option B:** All women should perform breast self-examination monthly [not annually].
- **Option C:** The hormonal receptor assay is done on a known breast tumor to determine whether the tumor is estrogen- or progesterone-dependent.
- **Option D:** A physician checkup every 2 years will not detect early signs of breast cancer.

14. The nurse is preparing for the discharge of a client who has been hospitalized for paranoid schizophrenia. The client's husband expresses concern over whether his wife will continue to take her daily prescribed medication. The nurse should inform him that:

A. His concern is valid but his wife is an adult and has the right to make her own decisions.

B. He can easily mix the medication in his wife's food if she stops taking it.

C. His wife can be given a long-acting medication that is administered every 1 to 4 weeks.

D. His wife knows she must take her medication as prescribed to avoid future hospitalizations.

Correct Answer: C. His wife can be given a long-acting medication that is administered every 1 to 4 weeks.

Long-acting psychotropic drugs can be administered by depot injection every 1 to 4 weeks. These agents are useful for noncompliant clients because the client receives the injection at the outpatient clinic. When schizophrenia is diagnosed, antipsychotic medication is most typically prescribed. This can be given as a pill, a patch, or an injection. There are long-term injections that have been developed which could eliminate the problems of a patient not regularly taking their medication (called "medication noncompliance").

- **Option A:** A client has the right to refuse medication, but this issue isn't the focus of discussion at this time. Someone with schizophrenia may not recognize that their behavior, hallucinations, or delusions are unusual or unfounded. This can cause a person to stop taking antipsychotic medication, stop participating in therapy, or both, which can result in a relapse into active phase psychosis.
- **Option B:** Medication should never be hidden in food or drink to trick the client into taking it; besides destroying the client's trust, doing so would place the client at risk for overmedication or under medication because the amount administered is hard to determine. While antipsychotic medication is effective in treating the positive symptoms of schizophrenia, it does not address negative symptoms.8 In addition, these drugs can have unwanted side effects including weight gain, drowsiness, restlessness, nausea, vomiting, low blood pressure, dry mouth, and lowered white blood cell count.
- **Option D:** Assuming the client knows she must take the medication to avoid future hospitalizations would be unrealistic. Psychotherapy also plays an important role in the treatment of schizophrenia. Cognitive-behavioral therapy has been shown to help patients develop and retain social skills, alleviate comorbid anxiety and depression symptoms, cope with trauma in their past, improve relationships with family and friends, and support occupational recovery.

15. When developing a plan of care for the client with stress incontinence, the nurse should take into consideration that stress incontinence is best defined as the involuntary loss of urine associated with:

A. A strong urge to urinate.

B. Overdistention of the bladder.

C. Activities that increase abdominal pressure.

D. Obstruction of the urethra.

Correct Answer: C. Activities that increase abdominal pressure

Stress incontinence is the involuntary loss of urine during such activities as coughing, sneezing, laughing, or physical exertion. These activities increase abdominal and detrusor pressure. Precipitating activities include coughing, laughing, sneezing, straining, or exercising. The patient may initially present with urinary complaints of dysuria, frequency, and urgency.

- **Option A:** A strong urge to urinate is associated with urge incontinence. Urge incontinence is a type of urinary incontinence in adults, which involves sudden compelling urges to void and results in involuntary leakage of urine. This is a serious and debilitating condition and has a social stigma attached to it. To avoid the huge socioeconomic burden and high morbidity associated with this condition, early diagnosis, treatment, and referral concepts must be widely practiced among clinicians.
- **Option B:** Overdistention of the bladder can lead to overflow incontinence. Overflow urinary incontinence is the involuntary leakage of urine from an overdistended bladder due to impaired detrusor contractility and/or bladder outlet obstruction. Neurologic diseases such as spinal cord injuries, multiple sclerosis, and diabetes can impair detrusor function.
- **Option D:** Obstruction of the urethra can lead to urinary retention. Obstructive uropathy is a disorder of the urinary tract that occurs due to obstructed urinary flow and can be either structural or functional. The back-up of urine into the unilateral or bilateral kidneys, depending on the location of the obstruction, causes hydronephrosis.

16. Conney with borderline personality disorder who is to be discharged soon threatens to “do something” to herself if discharged. Which of the following actions by the nurse would be most important?

A. Ask a family member to stay with the client at home temporarily.

B. Discuss the meaning of the client’s statement with her.

C. Request an immediate extension for the client.

D. Ignore the client's statement because it’s a sign of manipulation.

Correct Answer: B. Discuss the meaning of the client’s statement with her.

Any suicidal statement must be assessed by the nurse. The nurse should discuss the client’s statement with her to determine its meaning in terms of suicide. 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 A:** The individual must not be left alone. In the ED, such a recommendation is handled easily by hospital security personnel. In other settings, summon assistance quickly. In an isolated place, call 911. Involve family or friends; they can remain with the patient while treatment arrangements are made.

- **Option C:** 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.
- **Option D:** 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.

17. Which of the following meal choices is suitable for a 6-month-old infant?

A. Pea puree, formula, and orange juice

B. Honey cereals, carrot stick, apple juice

C. Rice cereal, mashed sweet potato, formula

D. Melba toast, banana puree, whole milk

Correct Answer: C. Rice cereal, mashed sweet potato, formula

- Option C: A 6 month-old baby can now be introduced to solid food other than breast milk. Start offering foods that are easily digested such as rice cereal, apple juice, and formula.
- Option A: A 6 month-old infant has a sensitive stomach. Giving an acidic fruit such as orange is not advisable.
- Option B: Honey containing products are discouraged due to the risk of botulism.
- Option D: Whole milk should be offered after 9 to 12 months of age.

18. A client is hospitalized for the first time, which of the following actions ensure the safety of the client?

A. Keep unnecessary furniture out of the way.

B. Keep the lights on at all times.

C. Keep side rails up at all times.

D. Keep all equipment out of view.

Correct Answer: C. Keep side rails up at all time

Keeping the side rails up at all times ensures the safety of the client. The risk of falling increases with age and the number of times someone has been in hospital. During the client's hospital stay, he may be more unsteady on his feet because of illness or surgery, or because he is unfamiliar with the hospital environment or is taking new medication.

- **Option A:** Home health care providers need to know the risk factors for falls and demonstrate effective assessment and interventions for fall and injury prevention. Falls are generally the result of a complex set of intrinsic patient and extrinsic environmental factors. Use of a fall-prevention

program, standardized tools, and an interdisciplinary approach may be effective for reducing fall-related injuries.

- **Option B:** Make sure the client's pajamas, dressing gown, and day clothes are the right length so they don't trip over them. Check that their slippers or other footwear fit properly and are not slippery. If they have to wear pressure stockings, wear slippers over them so they do not slip.
- **Option D:** Keep personal items and the call button within reach to avoid standing and walking to get them. Ask for help when in need to get out of bed to use the toilet if not feeling at all unsteady.

19. Referencing the image below, what is the name of the structure marked #7.

A. Minor calyx

B. Major calyx

C. Cortical blood vessels

D. Interlobal blood vessels

E. Arcuate blood vessels

F. Renal vein

G. Renal nerve

H. Renal artery

I. Renal pelvis

J. Renal pyramid

Correct answer: #17 is Option A. Minor calyx

The minor calyces are the smallest of the three divisions of the renal collecting system. They are cup-shaped structures that collect urine from the renal papillae, which are the tips of the renal pyramids. The minor calyces merge to form the major calyces.

20. A 65-year-old retired school teacher, diagnosed with osteoarthritis in both knees, attends a rehabilitation clinic. She expresses the desire to remain active and participate in her weekly dance class, albeit with some modifications due to her condition. During one of her physical therapy sessions, the therapist explained the importance of a therapeutic exercise program tailored to her needs. Later, the nurse assesses the patient's comprehension of the program. Which statement by the patient indicates an understanding of the therapeutic exercise program?

A. "I will perform exercises to the point of pain to maximize the benefits."

B. "I will avoid exercising on days when I experience joint stiffness."

C. "I will use resistance bands to perform strength training exercises."

. "I will perform exercises in a standing position to improve joint flexibility."

Correct Answer: C. "I will use resistance bands to perform strength training exercises."

Resistance bands are often used in physical therapy for osteoarthritis patients to improve muscle strength without putting excessive stress on the joints. Strength training, when done correctly and under guidance, can provide support to the affected joints and decrease pain. Given the patient's desire to remain active and the nature of osteoarthritis management, strength training exercises using resistance bands would provide the muscle support necessary for joint health without causing undue stress.

- **Option A:** This statement reflects a misconception. Exercises should not be performed to the point of pain. While some discomfort is expected during physical therapy, pushing oneself to the point of pain can lead to injury or exacerbate existing conditions.
- **Option B:** Avoiding exercises altogether on days of stiffness is not typically recommended. Light exercises or warm-ups can actually help relieve stiffness. Regular, gentle movement can prevent further joint stiffness and maintain mobility.
- **Option D:** While standing exercises can be beneficial, the position of exercises (standing, sitting, lying down) is dependent on the individual's needs, the affected joints, and the specific goals of the therapy. Standing exercises might not always be the most suitable for improving joint flexibility, especially for someone with knee osteoarthritis.

21. A mother of a 3-year-old hospitalized with lead poisoning asks the nurse to explain the treatment for her daughter. The nurse's explanation is based on the knowledge that lead poisoning is treated with:

A. Gastric lavage

B. Chelating agents

C. Antiemetics

D. Activated charcoal

Correct Answer: B. Chelating agents

- Option B: Chelating agents are used to treat the client with poisonings from heavy metals such as lead and iron.
- Options A and D: Gastric lavage and activated charcoal are used to remove noncorrosive poisons.
- Option C: Antiemetics prevents vomiting only and would not treat lead poisoning.

22. 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.

23. The nurse is working on a surgical floor. The nurse must log roll a male client following a:

A. Laminectomy.

B. Thoracotomy.

C. Hemorrhoidectomy.

D. Cystectomy.

Correct Answer: A. Laminectomy.

The client who has had spinal surgery, such as laminectomy, must be logrolled to keep the spinal column straight when turning. Laminectomy is among the most common procedures performed by spinal surgeons to decompress the spinal canal in various conditions. Preoperative and postoperative patient care is crucial to improve outcomes of laminectomy.

- **Option B:** Recovery for thoracotomy patients can be improved and hastened with attention to detail postoperatively. Key interventions that seem simple and may be easy to neglect will greatly benefit them. These include appropriate and timely use of pain medication, frequent and proper use of incentive spirometry, ambulation in hallways, regular work with physical therapy and occupational therapy if necessary, and attention to detail while caring for patient incision sites.
- **Option C:** Under normal circumstances, hemorrhoidectomy is an outpatient procedure, and the client may resume normal activities immediately after surgery. Success rates of removal are excellent, with low rates of recurrence. When comparing open and closed techniques, they both have similar rates of postoperative pain, need for analgesics, and complications.
- **Option D:** The client who has had a cystectomy may turn himself or may be assisted into a comfortable position. While it may be tough, patients are strongly encouraged to begin walking early as this is one of the most important things they can do to improve recovery and prevent complications after surgery.

24. Miss Mary, an 88-year old woman, believes that life should not be prolonged when hope is gone. She has decided that she does not want extraordinary measures taken when her life is at its end. Because she feels this way, she has talked with her daughter about her desires, completing a living will, and left

directions with her physician. This is an example of:

A. Affirming a value

B. Choosing a value

C. Prizing a value

D. Reflecting a value

Correct Answer: C. Prizing a value.

The alternative goal of value awareness is enabling patients to achieve their desired balance between rational and nonrational decision-making, allowing them to be as rational as they can and want to be. That means doing everything possible to make the critical issues clear, thereby expanding the envelope of potentially rational decision-making.

- **Option A:** Nurses engaged with mortality through a process of recognition and through the affirmation of their values. The affirmed values are aligned with the palliative care approach and within the ethics of finitude lens in that their enactment is partly premised on the recognition of patients' accumulated losses related to human facticities (social, temporal, mortal).
- **Option B:** Advance directives treat patients (and their surrogates) as rational actors, who will choose the option with the highest expected utility if provided needed information. The rational actor model assumes well-formulated decisions, with each option (e.g., treatment) represented as a vector of expected outcomes (e.g., pain, anxiety, life expectancy) that a decision-maker can weigh by relative importance.
- **Option D:** Reflection brings learning to life. Reflective practice helps learners find relevancy and meaning in a lesson and make connections between educational experiences and real-life situations. It increases insight and creates pathways to future learning. Reflection is called by many different names in the education field including processing, reviewing, and debriefing.

25. A nurse caring for a client with an ileostomy understands that the client is most at risk for developing which acid-base disorder?

A. Respiratory acidosis

B. Respiratory alkalosis

C. Metabolic acidosis

D. Metabolic alkalosis

Correct Answer: C. Metabolic acidosis

Intestinal secretions are high in bicarbonate and may be lost through enteric drainage tubes or an ileostomy or with diarrhea. These conditions result in metabolic acidosis. Non-gap metabolic acidosis is primarily due to the loss of bicarbonate, and the main causes of this condition are diarrhea and renal tubular acidosis. Anion gap metabolic acidosis is frequently due to anaerobic metabolism and lactic acid accumulation. While lactate is part of many mnemonics for metabolic acidosis, it is important to distinguish it is not a separate etiology, but rather a consequence of a condition.

- **Option A:** In acute respiratory acidosis, there is a sudden elevation of PCO2 because of failure of ventilation. This may be due to cerebrovascular accidents, use of central nervous system (CNS) depressants such as opioids, or inability to use muscles of respiration because of disorders like myasthenia gravis, muscular dystrophy or Guillain-Barre Syndrome. Because of its acute nature,

there is a slight compensation occurring minutes after the incidence.

- **Option B:** HCO3 functions as an alkalotic substance. CO2 (carbon dioxide) functions as an acidic substance. Therefore, Increases in HCO3 (bicarbonate) or decreases in CO2 will make blood more alkalotic. The opposite is also true where decreases in HCO3 or an increase in CO2 will make blood more acidic. CO2 levels are physiologically regulated by the pulmonary system through respiration, whereas the HCO3 levels are regulated through the renal system with reabsorption rates.
- **Option D:** Stomach fluids are highly acidic at a pH of approximately 1.5 to 3.5. Hydrogen secretion is accomplished via parietal cells in the gastric mucosa. Therefore, the large volume loss of gastric secretions will correlate as a loss of hydrogen chloride, an acidic substance, leading to a relative increase in bicarbonate in the blood, thus driving alkalosis. Losses can occur pathologically via vomitus or nasogastric suctioning.

26. A client with which of the following conditions may be likely to develop rectal cancer?

A. Adenomatous polyps

B. Diverticulitis

C. Hemorrhoids

D. Peptic ulcer disease

Correct Answer: A. Adenomatous polyps

A client with adenomatous polyps has a higher risk of developing rectal cancer than others do. Familial adenomatous polyposis (FAP), a rare disorder that causes hundreds or even thousands of polyps to develop in the lining of the colon beginning during teenage years. If the polyps aren't treated, the risk of developing colorectal cancer is nearly 100 percent, usually before age 40.

- **Option B:** Clients with diverticulitis are more likely to develop colon cancer. The risk of colorectal cancer is increased in the short-term period after hospitalization related to diverticular disease. According to a recent systematic review and meta-analysis, the prevalence of colorectal cancer is 1.6% in patients with acute diverticulitis who underwent colonoscopy.
- **Option C:** Hemorrhoids don't increase the chance of any type of cancer. For many, cancer is the first thing that comes to mind when experiencing blood in their stool for the first time. While colorectal cancer can cause similar symptoms, hemorrhoids are far more common. As uncomfortable as hemorrhoids can be, they're easily treatable and don't cause cancer.
- **Option D:** Clients with peptic ulcer disease have a higher incidence of gastric cancer. Helicobacter pylori infection, now considered to be a cause of gastric cancer, is also strongly associated with gastric and duodenal ulcer disease. The discovery of these relations has brought the long-controversial connection between peptic ulcers and gastric cancer into focus.

27. What is a characteristic of an audio recording of an unpublished research study reported at a professional conference?

A. Databased literature

B. Secondary Sources

C. Are more difficult to analyze than written reports.

D. Are not useful because they are not published.

Correct Answer: A. Databased literature

Audio and video recordings of research presentations are examples of data based literature. As the name suggests, data-based literature is based on empirical information collected by the researcher. Non-data-based writings, on the other hand, 'reflect the writer's experiences or opinions and can range from the highly theoretical to popular testimonials' (Merriam 1988: 61).

- **Option B:** Secondary sources were created by someone who did not experience first-hand or participate in the events or conditions you're researching. For a historical research project, secondary sources are generally scholarly books and articles. A secondary source interprets and analyzes primary sources.
- **Option C:** As the name suggests, an annotated bibliography contains a list of relevant studies relating to the research question or issue. These may range from brief research reports to books. Each entry contains a summary or abstract of the particular work.
- **Option D:** A literature review differs from an annotated bibliography in that the researcher extracts and synthesizes the main points, issues, findings, and research methods that emerge from a critical review of the readings. Merriam (1988) suggests that, in carrying out a literature review, it is a good idea to differentiate between data-based research and non-data-based writings.

28. The nurse would monitor for decreased effect of amphetamines when these drugs are given with:

A. Caffeine

B. Antidiabetic agents

C. Tricyclic antidepressants

D. All of the above

Correct Answer: C. MAO inhibitors

MAO inhibitors must never be given with drugs affecting the CNS because hypertension can occur. Amphetamine is contraindicated during or within 14 days of MAOI therapy, e.g., phenelzine, due to the risk of hypertensive crisis.

- **Option A:** Caffeine-amphetamine interactions were studied to determine whether attenuation of amphetamine-induced activity by caffeine pretreatment (30 mg/kg) is the result of increased or decreased sensitivity to amphetamine. Results support a reduction in sensitivity to amphetamine. A cross-tolerance design revealed an asymmetrical interaction between caffeine and amphetamine. Multiple caffeine treatments (30 mg/kg) produced tolerance and attenuation of subsequent amphetamine activity.
- **Option B:** Amphetamines can be given with oral hypoglycemics and insulin as long as blood sugar levels are monitored because these can decrease antidiabetic requirements.
- **Option D:** Tricyclic antidepressants differ in their relative effects on serotonin, norepinephrine, and acetylcholine. The differences are reflected in how the tricyclic antidepressants are used and, most importantly, their propensity to cause certain side effects. For instance, amitriptyline (Elavil) causes more sedation, dry mouth, and constipation than other tricyclic antidepressants.

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

A. Assess skin turgor

B. Assess bowel sounds

C. Assess temperature

D. Assess level of consciousness

Correct Answer: D. Assess level of consciousness

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

30. Nurse Lilly has been assigned to a client with Raynaud's disease. Nurse Lilly realizes that the etiology of the disease is unknown but it is characterized by:

A. Episodic vasospastic disorder of capillaries

B. Episodic vasospastic disorder of small veins

C. Episodic vasospastic disorder of the aorta

D. Episodic vasospastic disorder of the small arteries

Correct Answer: D. Episodic vasospastic disorder of the small arteries

Raynaud's disease is characterized by vasospasms of the small cutaneous arteries that involve fingers and toes. In Raynaud phenomenon, blood-flow restriction occurs during cold temperatures and emotional stress. Specifically, in Raynaud phenomenon, there is vasoconstriction of the digital arteries and cutaneous arterioles.

- **Option A:** Only the arteries are affected in Raynaud's disease. With cold temperatures, the sympathetic nervous system causes the release of vasoconstricting neuropeptides and norepinephrine leading to vasoconstriction of arteriole smooth muscle and decreased blood flood to the skin. Of note, in secondary Raynaud phenomenon, endothelin-1 is released by endothelial cells which causes vasoconstriction.
- **Option B:** The veins are unaffected by the vasospasm occurring with Raynaud's disease. In the primary Raynaud phenomenon, an increase in alpha-2 adrenergic sensitivity in the digital and cutaneous vessels results in the vasoconstrictive response to cold temperatures and emotional stress. Alpha-2 adrenergic receptors are present on the distal arterial smooth muscles of the digits

and affected by the sympathetic nervous system.

- **Option C:** The aorta is a major blood vessel unaffected by Raynaud's disease. In the secondary Raynaud phenomenon, the underlying disease is the factor that disrupts normal vessel reactivity to cold temperatures. Usually, the endothelial function of the digital and cutaneous vessels is compromised leading to eventual vasoconstriction with resulting tissue ischemia.

31. When teaching a client about contraception. Which of the following would the nurse include as the most effective method for preventing sexually transmitted infections?

A. Spermicides

B. Diaphragm

C. Condoms

D. Vasectomy

Correct Answer: C. Condoms

Condoms, when used correctly and consistently, are the most effective contraceptive method or barrier against bacterial and viral sexually transmitted infections.

- **Option A:** Although spermicides kill sperm, they do not provide reliable protection against the spread of sexually transmitted infections, especially intracellular organisms such as HIV.
- **Option B:** Insertion and removal of the diaphragm along with the use of the spermicides may cause vaginal irritations, which could place the client at risk for infection transmission.
- **Option D:** Male sterilization eliminates spermatozoa from the ejaculate, but it does not eliminate bacterial and/or viral microorganisms that can cause sexually transmitted infections.

32. George, a 17-year-old individual, is attending a health education session at a community clinic. The clinic is conducting screenings and teaching about early detection of common health issues in young adults. George has a family history of testicular cancer and is seeking information on how to reduce his risk. The nurse should include education on testicular self-examinations as part of the session. At what age should the nurse emphasize the initiation of regular testicular self-examinations?

A. At the onset of sexual activity to ensure sexual health is maintained.

B. After the age of 69, as part of a routine examination for senior health.

C. Starting after age 40, coinciding with increased risk for other male health issues.

D. Prior to the age of 20, to establish early detection habits during the peak incidence of testicular cancer.

E. During the annual physical examination, regardless of age, to ensure consistency.

Correct Answer: D. Prior to the age of 20, to establish early detection habits during the peak incidence of testicular cancer.

Educating George and other young individuals about the importance of regular testicular self-examinations can lead to the early detection of abnormalities, which is crucial for early intervention, especially given George's family history of testicular cancer. Testicular cancer commonly occurs in men between ages 20 and 30. A male client should be taught how to perform testicular self-examination before age 20, preferably when he enters his teens.

33. The nurse is caring for a hospitalized client who has chronic renal failure. Which of the following nursing diagnoses are most appropriate for this client? Select all that apply.

A. Excess Fluid Volume

B. Imbalanced Nutrition; Less than Body Requirements

C. Activity Intolerance

D. Impaired Gas Exchange

E. Pain.

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

Appropriate nursing diagnoses for clients with chronic renal failure include excess fluid volume related to fluid and sodium retention; imbalanced nutrition, less than body requirements related to anorexia, nausea, and vomiting; and activity intolerance related to fatigue.

- **Option A:** Renal disorder impairs glomerular filtration that results in fluid overload. With fluid volume excess, hydrostatic pressure is higher than the usual pushing excess fluids into the interstitial spaces. Since fluids are not reabsorbed at the venous end, fluid volume overloads the lymph system and stays in the interstitial spaces.
- **Option B:** Due to restricted foods and prescribed dietary regimens, an individual experiencing renal problems cannot maintain ideal body weight and sufficient nutrition. At the same time, patients may experience anemia due to decreased erythropoietic factors that cause a decrease in the production of RBC causing anemia and fatigue.
- **Option C:** Assess the extent of weakness, fatigue, ability to participate in active and passive activities. This provides information about the impact of activities on fatigue and energy reserves.
- **Option D:** Gas exchange is not impaired in CRF. Instead, there is a dysfunction in renal tissue perfusion. For optimal cell functioning the kidney excrete potentially harmful nitrogenous products-urea, creatinine, and uric acid, but because of the loss of kidney excretory functions, there is impaired excretion of the nitrogenous waste product causing an increase in laboratory results of BUN, creatinine, and uric acid level.
- **Option E:** Pain is a discomfort that is caused by the stimulation of the nerve endings. Any trauma that the kidney experiences (by any causes or factors) is perceived by the body as a threat, the body releases cytokine and prostaglandin causing pain which is felt by the patient at his flank area.

34. A 45-year-old marathon runner comes to a health clinic for a routine checkup before participating in an upcoming running event. The patient's medical history is unremarkable and he denies any complaints or recent illnesses. The healthcare provider decides to perform a complete blood count (CBC) to ensure there are no underlying conditions that might affect the patient's performance or health during the event. The results of the CBC show

that the formed elements in the patient's blood sample predominantly consist of a specific cell type known for its vital role in oxygen transport throughout the body, ensuring the tissues receive the necessary oxygen for metabolic activities. Based on this information, which of the following cell types is most likely to be predominant in this patient's blood sample?

A. Albumins

B. Globulins

C. Leukocytes (white blood cells)

D. Erythrocytes (red blood cells)

E. Thrombocytes (platelets)

Correct Answer: D. Erythrocytes (red blood cells)
Erythrocytes, or red blood cells, are the most common cell type among the formed elements in the blood and are essential for transporting oxygen from the lungs to tissues throughout the body. They contain hemoglobin, a molecule that binds oxygen and is crucial for aerobic respiration in the tissues, making them the primary cell type involved in oxygen transport.

- **Option A:** Albumins are proteins found in the plasma, not cells. They play a role in maintaining oncotic pressure but do not transport oxygen.
- **Option B:** Like albumins, globulins are proteins found in the plasma that function in the immune response and transport of various substances, but they are not cells and do not have a primary role in oxygen transport.
- **Options C:** Leukocytes are involved in the immune response and defending the body against infections. They do not play a role in oxygen transport.
- **Option E:** Thrombocytes or platelets are involved in hemostasis and help prevent bleeding by forming clots at the site of vascular injury. They do not have a role in oxygen transport.

35. Which nurse should be assigned to care for the postpartum client with preeclampsia?

A. The RN with 2 weeks of experience in postpartum

B. The RN with 3 years of experience in labor and delivery

C. The RN with 10 years of experience in surgery

D. The RN with 1 year of experience in the neonatal intensive care unit

Correct Answer: B. The RN with 3 years of experience in labor and delivery

The nurse with 3 years of experience in labor and delivery knows the most about possible complications involving preeclampsia. Registered nurses need to know their rights and responsibilities when considering a patient assignment. The nurse-patient assignment process is also often a manual process in which the charge nurse must sort through multiple decision criteria in a limited amount of time.

- **Option A:** The nurse is a new staff to the unit hence lacking the experience needed. Most nurse-patient assignment models have focused on balancing patient acuity measures. This focus on patient acuity concentrates workload measures on direct patient care activities. While this is

very important for the care of the patient, it does not necessarily take into account all of the activities comprising a nurse's workload.

- **Option C:** The nurse with experience in surgery does not have the same experience in labor and delivery. Balancing workload among nurses on a hospital unit is important for the satisfaction and safety of nurses and patients. To balance nurse workloads, direct patient care activities, indirect patient care activities, and non-patient care activities that occur throughout a shift must be considered.
- **Option D:** This nurse lacks sufficient experience with a postpartum client. Limitations in experience and knowledge may not require refusal of the assignment, but rather an agreement regarding supervision or a modification of the assignment to ensure patient safety. If no accommodation for limitations is considered, the nurse has an obligation to refuse an assignment for which she or he lacks education or experience.

36. A nurse provides instructions to a client regarding the administration of the prednisone and instructs the client that the best time to take the medication is during?

A. Before breakfast

B. After breakfast

C. Evening

D. Before bedtime

Correct Answer: B. After breakfast

Prednisone is a corticosteroid (glucocorticoids) and It should be administered early in the morning because it helps in decreasing the risk for adrenal insufficiency and stimulates the burst of glucocorticoids released naturally by the adrenal glands each morning.

- **Option A:** Prednisone can cause gastric upset and should always be taken with a meal.
- **Options C & D:** One of the common side effects of the medication is insomnia so it is best taken in the morning.

37. When evaluating a client's adaptation to pain, which behavior indicates appropriate adaptation?

A. The client distracts himself during pain episodes.

B. The client denies the existence of any pain.

C. The client reports no need for family support.

D. The client reports pain reduction with decreased activity.

Correct Answer: A. The client distracts himself during pain episodes.

Distraction is an appropriate method of reducing pain. This technique involves heightening one's concentration upon non-painful stimuli to decrease one's awareness and experience of pain. Drawing the person away from the pain lessens the perception of pain. Examples include reading, watching TV, playing video games, and guided imagery.

- **Option B:** Denying the existence of any pain is inappropriate and not indicative of coping. It is essential to assist patients to express as factually as possible (i.e., without the effect of mood, emotion, or anxiety) the effect of pain relief measures. Inconsistencies between behavior or appearance and what the patient says about pain relief (or lack of it) may be more a reflection of other methods the patient is using to cope with the pain rather than pain relief itself.
- **Option C:** Exclusion of family members and other sources of support represents a maladaptive response. Nurses have the duty to ask their clients about their pain and believe their reports of pain. Challenging or undermining their pain reports results in an unhealthy therapeutic relationship that may hinder pain management and deteriorate rapport.
- **Option D:** Range-of-motion exercises and at least mild activity, not a decreased activity, can help reduce pain and are important to prevent complications of immobility. Nonpharmacologic methods in pain management may include physical, cognitive-behavioral strategies, and lifestyle pain management. These methods are used to provide comfort by altering psychological responses to pain.

38. When planning care for a client with ulcerative colitis who is experiencing symptoms, which client care activities can the nurse appropriately delegate to an unlicensed assistant? Select all that apply.

A. Assessing the client's bowel sounds.

B. Providing skincare following bowel movements.

C. Evaluating the client's response to antidiarrheal medications.

D. Maintaining intake and output records.

E. Obtaining the client's weight.

Correct Answer: B, D, and E.

The nurse can delegate the following basic care activities to the unlicensed assistant: providing skincare following bowel movements, maintaining intake and output records, and obtaining the client's weight. Assessing the client's bowel sounds and evaluating the client's response to medication are registered nurse activities that cannot be delegated.

- **Option A:** Assessing a patient's abdomen can provide critical information about his internal organs. Always follow this sequence: inspection, auscultation, percussion, and palpation. Changing the order of these assessment techniques could alter the frequency of bowel sounds and make your findings less accurate.
- **Option C:** The evaluation of the effectiveness of pharmacotherapy includes measurable improvement in clinical signs and symptoms and/or laboratory values. The evaluation of the safety of pharmacotherapy includes evidence of adverse drug reactions and/or toxicity.

39. An elderly client is hospitalized for transurethral resection of the prostate (TURP). Which finding postoperatively should be reported to the doctor immediately?

A. Hourly urinary output of 40–50 cc

B. Bright red urine output with many clots

C. Dark red urine output with few clots

D. Requests for pain med q 4 hrs.

Correct Answer: B. Bright red urine with many clots

- Option B: Transurethral resection of the prostate (TURP) is a surgical procedure that involves the removal of a section of the prostate. It is indicated for people with an enlarged prostate. After the procedure, a urinary catheter with continuous bladder irrigation is done to remove and prevent blood clots in the bladder. Bright red bleeding with many clots may indicate the need to increase the rate of irrigation infusion per physician's order.
- Option A: A urine output measuring 40-50 cc is within normal limits.
- Option C: Dark red urine with few clots is normal for a few days after surgery.
- Option D: This does not indicate an excessive need for pain management that requires the doctor's attention.

40. In clients with a cognitive impairment disorder, the phenomenon of increased confusion in the early evening hours is called:

A. Aphasia.

B. Agnosia.

C. Sundowning.

D. Confabulation.

Correct Answer: C. Sundowning.

Sundowning is a common phenomenon that occurs after daylight hours in a client with a cognitive impairment disorder. The term "sundowning" refers to a state of confusion occurring in the late afternoon and spanning into the night. Sundowning can cause a variety of behaviors, such as confusion, anxiety, aggression, or ignoring directions. Sundowning can also lead to pacing or wandering. Sundowning isn't a disease, but a group of symptoms that occur at a specific time of the day that may affect people with dementia, such as Alzheimer's disease. The exact cause of this behavior is unknown.

- **Option A:** Aphasia is an impairment of language, affecting the production or comprehension of speech and the ability to read or write. Aphasia is always due to injury to the brain-most commonly from a stroke, particularly in older individuals. Aphasia can be so severe as to make communication with the patient almost impossible, or it can be very mild. It may affect mainly a single aspect of language use, such as the ability to retrieve the names of objects, or the ability to put words together into sentences, or the ability to read. More commonly, however, multiple aspects of communication are impaired, while some channels remain accessible for a limited exchange of information.
- **Option B:** Agnosia is a rare disorder whereby a patient is unable to recognize and identify objects, persons, or sounds using one or more of their senses despite otherwise normally functioning senses. The deficit cannot be explained by memory, attention, language problems, or unfamiliarity to the stimuli. Usually, one of the sensory modalities is affected.
- **Option D:** Confabulation is a type of memory error in which gaps in a person's memory are unconsciously filled with fabricated, misinterpreted, or distorted information. When someone confabulates, they are confusing things they have imagined with real memories. A person who is confabulating is not lying. They are not making a conscious or intentional attempt to deceive.

Rather, they are confident in the truth of their memories even when confronted with contradictory evidence.

41. On which of the postpartum days can the client expect lochia serosa?

A. Days 3 and 4 PP

B. Days 3 to 10 PP

C. Days 10-14 PP

D. Days 14 to 42 PP

Correct Answer: B. Days 3 to 10 PP.

On the third and fourth PP days, the lochia becomes a pale pink or brown and contains old blood, serum, leukocytes, and tissue debris. This type of lochia usually lasts until PP day 10. The mother might notice increased lochia when she gets up in the morning when she is physically active, or while breastfeeding. Moms who have cesarean sections may have less lochia after 24 hours than moms who had vaginal deliveries. The bleeding generally stops within 4 to 6 weeks after delivery. The mother should wear pads, not tampons, as nothing should go in the vagina for six weeks.

- **Option A:** The lochia is the vaginal discharge that originates from the uterus, cervix, and vagina. The lochia is initially red and comprises blood and fragments of decidua, endometrial tissues, and mucus and lasts 1 to 4 days. Lochia rubra usually lasts for the first 3 to 4 days PP.
- **Option C:** The lochia then changes color to yellowish or pale brown, lasting 5 to 9 days, and is composed mainly of blood, mucus, and leukocytes. Lochia alba, which contains leukocytes, decidua, epithelial cells, mucus, and bacteria, may continue for 2 to 6 weeks PP.
- **Option D:** Finally, the lochia is white and contains mostly mucus, lasting up to 10 to 14 days. The lochia can persist up to 5 weeks postpartum. The persistence of red lochia beyond one week might be an indicator of uterine subinvolution. The presence of an offensive odor or large pieces of tissue or blood clots in lochia or the absence of lochia might be a sign of infection.

42. Polyethylene glycol-electrolyte solution (GoLYTELY) is prescribed for the female client scheduled for a colonoscopy. The client begins to experience diarrhea following the administration of the solution. What action by the nurse is appropriate?

A. Start an IV infusion

B. Administer an enema

C. Cancel the diagnostic test

D. Explain that diarrhea is expected

Correct Answer: D. Explain that diarrhea is expected.

The solution GoLYTELY is a bowel evacuant used to prepare a client for a colonoscopy by cleansing the bowel. The solution is expected to cause mild diarrhea and will clear the bowel in 4 to 5 hours. Polyethylene glycol electrolyte (PEG) is essential for a wide range of bowel preparation, with advantages such as high security, reliable effect, no dehydration, and electrolyte disturbance.

- **Option A:** Starting an IV is unnecessary. Surveys, such as those conducted by Seo et al., have shown that colon cleanliness was the highest at time intervals of 3–5 h after a one-time oral administration of 4 L of PEG solution, whereas colon cleanliness was significantly decreased at time intervals of <3 or >7 h.
- **Option B:** Administering an enema would be inappropriate. Bacteria in intestinal feces account for 20%–30% of the solid weight of feces. This also accords with earlier observations that the PEG solution can only effectively remove solid residues in feces and has no significant effect on colonic bacteria and flora.
- **Option C:** Cancelling the test would be inappropriate. PEG solution combined with lactulose improves the quality of bowel preparation in patients with long interval P-C, which allows patients to have no restriction on the time of colonoscopy, and benefits more patients who need a colonoscopy.

43. An adult woman is admitted to an isolation unit in the hospital after tuberculosis was detected during a pre-employment physical. Although frightened about her diagnosis, she is anxious to cooperate with the therapeutic regimen. The teaching plan includes information regarding the most common means of transmitting the tubercle bacillus from one individual to another. Which contamination is usually responsible?

A. Eating utensils

B. Hands

C. Milk products

D. Droplet nuclei

Correct Answer: D. Droplet nuclei.

The most frequent means of transmission of the tubercle bacillus is by droplet nuclei. The bacillus is present in the air as a result of coughing, sneezing, and expectoration of sputum by an infected person. Although usually a lung infection, tuberculosis is a multi-system disease with protean manifestation. The principal mode of spread is through inhalation of infected aerosolized droplets.

- **Option A:** The tubercle bacillus is not transmitted by eating utensils. Some exogenous microbes can be transmitted via reservoirs such as linens or eating utensils. The TB bacteria are put into the air when a person with TB disease of the lungs or throat coughs, speaks or sings. People nearby may breathe in these bacteria and become infected.
- **Option B:** Hands are the primary method of transmission of the common cold. When a person breathes in TB bacteria, the bacteria can settle in the lungs and begin to grow. From there, they can move through the blood to other parts of the body, such as the kidney, spine, and brain.
- **Option C:** The tubercle bacillus is not transmitted by means of contaminated food. Contact with contaminated food or water could cause outbreaks of salmonella, infectious hepatitis, typhoid, or cholera.

44. Your patient with peritonitis is NPO and complaining of thirst. What is your priority?

A. Increase the I.V. infusion rate.

B. Use diversion activities.

C. Provide frequent mouth care.

D. Give ice chips every 15 minutes.

Correct Answer: C. Provide frequent mouth care.

Frequent mouth care helps relieve dry mouth. Maintain NPO with nasogastric or intestinal aspiration. This reduces hyperactivity of bowel and diarrhea losses. Observe skin or mucous membrane dryness, turgor. Note peripheral and sacral edema. Hypovolemia, fluid shifts, and nutritional deficits contribute to poor skin turgor, taut edematous tissues.

- **Option A:** Administer plasma or blood, fluids, electrolytes, diuretics as indicated. Replenishes circulating volume and electrolyte balance. Colloids (plasma, blood) help move water back into the intravascular compartment by increasing the osmotic pressure gradient. Diuretics may be used to assist in the excretion of toxins and to enhance renal function.
- **Option B:** Change position frequently, provide frequent skincare, and maintain dry or wrinkle-free bedding. Edematous tissue with compromised circulation is prone to breakdown.
- **Option D:** Eliminate noxious sights and smells from the environment. Limit intake of ice chips. This reduces gastric stimulation and vomiting response. Excessive use of ice chips during gastric aspiration can increase gastric washout of electrolytes.

45. Mrs. Cruz, 80 years old is diagnosed with pneumonia. Which of the following symptoms may appear first?

A. Altered mental status and dehydration

B. Fever and chills

C. Hemoptysis and Dyspnea

D. Pleuritic chest pain and cough

Correct Answer: A. Altered mental status and dehydration

Elderly clients may first appear with only an altered mental status and dehydration due to a blunted immune response.

- **Option B:** Fever and chills are classic signs of pneumonia that may appear later in the elderly. The inflammatory response results in a proliferation of neutrophils. This can damage lung tissue, leading to fibrosis and pulmonary edema, which also impairs lung expansion.
- **Option C:** Hemoptysis is a late sign of pneumonia. Bleeding in the lungs may originate from bronchial arteries, pulmonary arteries, bronchial capillaries, and alveolar capillaries. Dyspnea may occur early, especially among the elderly. Swelling and mucus can make it harder to move air through the airways, making it harder to breathe. This leads to shortness of breath, difficulty of breathing, and feeling more tired than normal.
- **Option D:** Cough and pleuritic chest pain are the common symptoms of pneumonia. The air sacs may fill with fluid or pus, causing cough with phlegm or ous, fever, chills, and difficulty breathing.

46. A client has died, and a nurse asks a family member about the funeral arrangements. The family member refuses to discuss the issue. The nurse's appropriate action is to: Select all that apply.

A. Show acceptance of feelings.

B. Provide information needed for decision making.

C. Suggest a referral to a mental health professional.

D. Remain with the family member without discussing funeral arrangements.

E. Let the family slowly acknowledge its impact.

Correct Answer: D & E.

Grief is a process that can begin long before the loss of a loved one. Similar to the stages of dying, individuals go through a process to help them eventually cope and be able to live with that loss. People never get over their loss but find ways to live with the loss and without their deceased loved one (ELNEC, 2010).

- **Option A:** This is an appropriate intervention for the acceptance or reorganization and restitution stage. In this final stage of grief, the person accepts the reality of the loss. It can't be reversed. Although he or she still feels sad, he or she is ready to start moving on in life.
- **Option B:** This may be an appropriate intervention for the bargaining stage. During this stage, he or she dwells on what could've been done to counteract the loss. General thoughts are "If only…" and "What if…".
- **Option C:** This may be an appropriate intervention for depression. Sadness sets in as the person begins to understand the loss and its effect on life. Indications of depression include crying, sleep issues, and a decreased appetite.
- **Option D:** The family member is exhibiting the first stage of grief (denial), and the nurse should remain with the family member. One of the biggest facilitators of this process that nurses can engage in is active listening. By actively listening to the bereaved, it helps them express their feelings and feel as though they are being heard.
- **Option E:** As the family moves through the experience and slowly acknowledges its impact, the initial denial and disbelief fade. Bereavement includes grief and mourning and has been considered to be the "time period in which the survivor adjusts to their life without their loved one" (ELNEC, 2010). This period can include the time right after the loss or death occurs, during the funeral proceedings, and during the grieving process afterward.

47. Which of the following individuals are communicating a message? Select all that apply.

A. A mother spanking her son for playing with matches

B. A teenage boy isolating himself and playing loud music

C. A biker sporting an eagle tattoo on his biceps

D. A teenage girl writing, "No one understands me."

E. A father checking for new e-mail on a regular basis

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

The nurse should determine that spanking, isolating, getting tattoos, and writing are all ways in which people communicate messages to others. It is estimated that about 70% to 90% of communication is nonverbal. It is the act of conveying meanings from one body or group to another through the use of mutually understood signs, symbols, and semiotic rules.

- **Option A:** Nonverbal communication involves the transmission of messages without the use of words. It involves facial expression, posture, touch, gestures, physical appearance, eye contact, and other body movements. These are considered more accurate expressions of true feelings. Gestures impart meanings that are more powerful than words.
- **Option B:** Listening is the ability to accurately receive and interpret messages in the communication process. (e.g., radio, audio conferencing). Various modes or mediums to transmit and receive the information are referred to as “communication channels.”
- **Option C:** Sight is the process, power, or function of seeing (e.g.., the sights of the newly-built hospital). Physical appearance or artifacts involves items in the client’s environment such as grooming or the use of clothing and jewelry. They may convey nonverbal messages that might enhance or hinder the real message of the spoken words.
- **Option D:** Reading refers to the complex cognitive process of decoding symbols involving word recognition, comprehension, fluency, and motivation (e.g., written letters, memos, chats, and messaging).
- **Option E:** Communication is the process of sharing information or the process of generating and transmitting meanings. The father checking for new emails on a regular basis lacks some of the elements of communication, such as the stimulus, receiver, and channel.

48. Nurse Stephanie is assessing a client who has an acute respiratory infection that puts her at risk for hypoxemia. Which of the following findings are early indications that should alert the nurse that the client is developing hypoxemia? Select all that apply.

A. Restlessness

B. Tachypnea

C. Bradycardia

D. Confusion

E. Cyanosis

Correct Answer: A, B, & E

Restlessness, tachypnea, and pallor are early manifestations of hypoxemia, along with tachycardia, elevated blood pressure, use of accessory muscles, nasal flaring, tracheal tugging, and adventitious lung sounds. Bradycardia and confusion are late manifestations of hypoxemia, along with stupor, cyanotic skin and mucous membranes, bradypnea, hypotension, and cardiac dysrhythmias. Hypoxemia is defined as a decrease in the partial pressure of oxygen in the blood whereas hypoxia is defined by reduced level of tissue oxygenation. It can be due to either defective delivery or defective utilization of oxygen by the tissues.

- **Option A:** When oxygen delivery is severely compromised, organ function will start to deteriorate. Neurologic manifestations include restlessness, headache, and confusion with moderate hypoxia. In severe cases, altered mentation and coma can occur, and if not corrected quickly may lead to death.
- **Option B:** The chronic presentation is usually less dramatic, with dyspnea on exertion as the most common complaint. Symptoms of the underlying condition that induced the hypoxia can help in narrowing the differential diagnosis. The physical exam may show tachypnea and low oxygen saturation. Fever may point to infection as the cause of hypoxia.

- **Option C:** Bradycardia is a late manifestation of hypoxemia. Increase in cardiac output with exercise results in accelerated blood flow through alveoli, reducing the time available for gas exchange. In case of the abnormal pulmonary interstitium, gas exchange time becomes insufficient, and hypoxemia ensues.
- **Option D:** Both confusion and somnolence may occur in respiratory failure. Myoclonus and seizures may occur with severe hypoxemia. Polycythemia is a complication of long-standing hypoxemia.
- **Option E:** Cyanosis, a bluish color of skin and mucous membranes, indicates hypoxemia. Visible cyanosis typically is present when the concentration of deoxygenated hemoglobin in the capillaries of tissues is at least 5 g/dL.

49. The nurse is observing several healthcare workers providing care. Which action by the healthcare worker indicates a need for further teaching?

A. The nursing assistant wears gloves while giving the client a bath.

B. The nurse wears goggles while drawing blood from the client.

C. The doctor washes his hands before examining the client.

D. The nurse wears gloves to take the client's vital signs.

Correct Answer: D. The nurse wears gloves to take the client's vital signs.

It is not necessary to wear gloves to take the vital signs of the client. If the client has an active infection with methicillin-resistant Staphylococcus aureus, gloves should be worn. Wash hands or perform hand hygiene before having contact with the patient. Also impart these duties to the patient and their significant others. Know the instances when to perform hand hygiene or "5 moments for hand hygiene".

- **Option A:** Wear personal protective equipment (PPE) properly. Wear gloves when providing direct care; perform hand hygiene after properly disposing of gloves. Initiate specific precautions for suspected agents as determined by CDC protocol.
- **Option B:** Use masks, goggles, face shields to protect the mucous membranes of your eyes, mouth, and nose during procedures and in direct-care activities (e.g., suctioning secretions) that may generate splashes or sprays of blood, body fluids, secretions, and excretions.
- **Option C:** The health care workers indicate knowledge of infection control by their actions. Friction and running water effectively remove microorganisms from hands. Washing between procedures reduces the risk of transmitting pathogens from one area of the body to another. Wash hands with antiseptic soap and water for at least 15 seconds followed by an alcohol-based hand rub. If hands were not in contact with anyone or anything in the room, use an alcohol-based hand rub and rub until dry. Plain soap is good at reducing bacterial counts but antimicrobial soap is better, and alcohol-based hand rubs are the best.

50. Following a full-thickness (third-degree) burn of his left arm, a male client is treated with artificial skin. The client understands postoperative care of artificial skin when he states that during the first 7 days after the procedure, he will restrict:

A. Range of motion

B. Protein intake

C. Going outdoors

D. Fluid ingestion

Correct Answer: A. Range of motion

To prevent disruption of the artificial skin's adherence to the wound bed, the client should restrict range of motion of the involved limb.

- **Options B & D:** Protein intake and fluid intake are important for healing and regeneration and shouldn't be restricted.
- **Option C:** Going outdoors is acceptable as long as the left arm is protected from direct sunlight.

51. 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.

52. The nurse calls security and has physical restraints applied when a client who is admitted voluntarily becomes both physically and verbally abusive while demanding to be discharged from the hospital. Which represents the possible legal ramifications for the nurse associated with these interventions? Select all that apply.

A. Libel

B. Battery

C. Assault

D. Slander

E. False Imprisonment

Correct Answer: B, C, and E.

Voluntary admission to an acute inpatient psychiatric hospital occurs when a person goes for psychiatric evaluation and the evaluating mental health provider and patient agree that the patient would benefit from hospitalization and meets the criteria for hospitalization.

- **Option A:** Libel is the publication of writing, pictures, cartoons, or any other medium that exposes a person to public hatred, shame, disgrace, or ridicule, or induce an ill opinion of a person, and are not true.
- **Option B:** Battery is the intentional act of causing physical harm to someone. Unlike assault, one doesn't have to warn the victim or make him fearful before hurting them for it to count as a battery.
- **Option C:** Assault and battery are related to the act of restraining the patient in a situation that did not meet the criteria for such an intervention. If the mental health professional evaluates the patient and feels that he/she is at risk of harm to self/others or unable to care for self, the mental health professional can convert the admission to involuntary admission.
- **Option D:** Slander is not applicable here since the nurse did not verbally make untrue statements about the patient. If the patient later requests discharge, the hospital can hold the patient on the unit for up to 72 hours until a mental health professional can evaluate the patient for safety concerns. The patient will be discharged if the evaluating mental health professional determines that the patient is safe for discharge.
- **Option E:** A false imprisonment is an act with the intent to confine a person to a specific area. The nurse can be charged with false imprisonment if the nurse prohibits a patient from leaving the hospital if the patient has been admitted voluntarily and if no agency or legal policies exist for detaining the patient.

54. Kathleen is admitted to the psychiatric clinic for treatment of anorexia nervosa. To promote the client's physical health, the nurse should plan to:

A. Severely restrict the client's physical activities.

B. Weigh the client daily, after the evening meal.

C. Monitor vital signs, serum electrolyte levels, and acid-base balance.

D. Instruct the client to keep an accurate record of food and fluid intake.

Correct Answer: C. Monitor vital signs, serum electrolyte levels, and acid-base balance.

An anorexic client who requires hospitalization is in poor physical condition from starvation and may die as a result of arrhythmias, hypothermia, malnutrition, infection, or cardiac abnormalities secondary to electrolyte imbalances. Therefore, monitoring the client's vital signs, serum electrolyte level, and acid-base balance is crucial. Work-up includes a thorough medical history (comprehensive review of systems, family and social history, medications including non-prescribed, past medical and psychiatric history, prior abuse) and physical exam (looking for complications above).

- **Option A:** This may worsen anxiety. Treatment for anorexia nervosa is centered on nutrition rehabilitation and psychotherapy. Outpatient treatment includes intensive therapy (2 to 3 hours per weekday) and partial hospitalization (6 hours per day). Pediatric patients benefit from family-based psychotherapy to explore underlying dynamics and restructure the home environment.
- **Option B:** This is incorrect because a weight obtained after breakfast is more accurate than one obtained after the evening meal. Diagnose by history, physical, and lab work that rules out other conditions that can make people lose weight. Treatment includes gaining weight (sometimes in a hospital if severe), therapy to address body image, and management of complications from malnourishment.
- **Option D:** This would reward the client with attention for not eating and reinforce the control issues that are central to the underlying psychological problem; also, the client may record food and fluid intake inaccurately. Patient and family education is key to preventing high morbidity. The dietitian should educate the family on the importance of nutrition and limiting exercise. The mental health nurse should educate the patient on changes in behavior, easing stress, and overcoming any emotional issues.

55. On admission to the emergency department the burned client's blood pressure is 90/60, with an apical pulse rate of 122. These findings are an expected result of what thermal injury-related response?

A. Fluid shift

B. Intense pain

C. Hemorrhage

D. Carbon monoxide poisoning

Correct Answer: A. Fluid shift

The physiologic effect of histamine release in injured tissues is a loss of vascular volume to the interstitial space, with a resulting decrease in blood pressure. After a burn, fluid shifts from vascular to interstitial and intracellular spaces because of increased capillary pressure, increased capillary and venular permeability, decreased interstitial hydrostatic pressure, chemical inflammatory mediators, and increased interstitial protein retention.

- **Option B:** Intense pain and carbon monoxide poisoning increase blood pressure. Superficial dermal burns are initially the most painful. Even the slightest change in the air currents moving past the exposed superficial dermis causes a patient to experience excruciating pain. Without the protective covering of the epidermis, nerve endings are sensitized and exposed to stimulation.
- **Option C:** Hemorrhage is unusual in a burn injury. The difference with a burn is the heat actually stops the blood from flowing. A small bit of blood may ooze out at first, but it won't actually bleed much.
- **Option D:** Most commonly, patients with carbon monoxide poisoning will present with headache (more than 90%), dizziness, weakness, and nausea. Patients may be tachycardic and tachypneic. They may exhibit hypotension. Mental status changes such as confusion, altered level of consciousness, disorientation, and memory loss may occur.

56. The nurse understands that the therapeutic effects of typical antipsychotic medications are associated with which neurotransmitters change?

A. Decreased dopamine level

B. Increased acetylcholine level

C. Stabilization of serotonin

D. Stimulation of GABA

Correct Answer: A. Decreased dopamine level

Excess dopamine is thought to be the chemical cause of psychotic thinking. The typical antipsychotics act to block dopamine receptors and therefore decrease the amount of neurotransmitter at the synapses. First-generation antipsychotics are dopamine receptor antagonists (DRA) and are known as typical antipsychotics. They include phenothiazines (trifluoperazine, perphenazine, prochlorperazine, acetophenazine, triflupromazine, mesoridazine), butyrophenones (haloperidol), thioxanthenes (thiothixene, chlorprothixene), dibenzoxazepines (loxapine), dihydroxyindole (molindone), and diphenylbutylpiperidine (pimozide).

- **Option B:** The first-generation antipsychotics work by inhibiting dopaminergic neurotransmission. Their effectiveness is best when they block about 72% of the D2 dopamine receptors in the brain. They also have noradrenergic, cholinergic, and histaminergic blocking action. Second-generation antipsychotics work by blocking D2 dopamine receptors as well as serotonin receptor antagonist action. the 5-HT2A subtype of serotonin receptor is most commonly involved.
- **Option C:** Second-generation antipsychotics are serotonin-dopamine antagonists and are also known as atypical antipsychotics. The Food and Drug Administration (FDA) has approved 12 atypical antipsychotics as of the year 2016. They are risperidone, olanzapine, quetiapine, ziprasidone, aripiprazole, paliperidone, asenapine, lurasidone, iloperidone, cariprazine, brexpiprazole, and clozapine.
- **Option D:** The typical antipsychotics do not increase acetylcholine, stabilize serotonin, stimulate GABA. GABA (gamma-aminobutyric acid) is a common neurotransmitter in the brain, and GABA-ergic neurons are thought to interact with antipsychotic medications, contributing to side effects such as tardive dyskinesia.

57. A male client has recently undergone surgical removal of a pituitary tumor. Dr. Wong prescribes corticotropin (Acthar), 20 units I.M. q.i.d. as a replacement therapy. What is the mechanism of action of corticotropin?

A. It decreases cyclic adenosine monophosphate (cAMP) production and affects the metabolic rate of target organs.

B. It interacts with plasma membrane receptors to inhibit enzymatic actions.

C. It interacts with plasma membrane receptors to produce enzymatic actions that affect protein, fat, and carbohydrate metabolism.

D. It regulates the threshold for water resorption in the kidneys.

Correct Answer: C. It interacts with plasma membrane receptors to produce enzymatic actions that affect protein, fat, and carbohydrate metabolism.

Corticotropin interacts with plasma membrane receptors to produce enzymatic actions that affect protein, fat, and carbohydrate metabolism. CRH is released from the hypothalamus. CRH stimulates the anterior pituitary to release ACTH. ACTH acts on the adrenal cortex to release cortisol and androgens. The increase in cortisol provides a negative feedback system to then decrease the amount of CRH released from the hypothalamus.

- **Option A:** It doesn't decrease cAMP production. ACTH works on G protein-coupled receptors on extracellular membranes on zona fasciculata and zona reticularis of the adrenal cortex. cAMP is the secondary messenger system. Activation of the g-coupled receptor activates adenylyl cyclase, thus increasing cAMP production.
- **Option B:** The adrenal cortex secretes glucocorticoids from the zona fasciculata and androgens from the zona reticularis. The secretion of glucocorticoids provides a negative feedback loop for inhibiting the release of CRH and ACTH from the hypothalamus and anterior pituitary, respectively. Stress stimulates the release of ACTH.
- **Option D:** The posterior pituitary hormone, antidiuretic hormone, regulates the threshold for water resorption in the kidneys. The anterior pituitary produces ACTH. It is considered a tropic hormone. Tropic hormones indirectly affect target cells by first stimulating other endocrine glands. Corticotropin-releasing hormone (CRH) is released from the hypothalamus which stimulates the anterior pituitary to release adrenocorticotropic hormone (ACTH). ACTH then acts on its target organ, the adrenal cortex.

58. A 65 year old female is experiencing a flare-up of pruritus. Which of the client's actions could aggravate the cause of flare-ups?

A. Sleeping in cool and humidified environment

B. Daily baths with fragrant soap

C. Using clothes made from 100% cotton

D. Increasing fluid intake

Correct Answer: B. Daily baths with fragrant soap

The use of fragrant soap is very drying to the skin hence causing pruritus. Avoid factors that may contribute to skin dryness such as overheating, hot baths, and soaps, shower and bath products. Use emollients for dry skin, including for washing, bathing, and showering.

- **Option A:** A cool and humidified environment could help moisten the skin. Dry skin could be very itchy. Lay a cool flannel that has been soaked in an emollient cream on the skin or apply a cooled emollient that has been kept in the refrigerator.
- **Option C:** Cotton is non-irritating and soft for the skin. Patting the skin instead of scratching and keeping nails short. Other interventions may include the use of behavior modification including habit reversal training, phototherapy, the use of systemic medications, which include antidepressants such as tricyclic and SSRIs, and anticonvulsants such as gabapentin and pregabalin.
- **Option D:** Increasing fluid intake could make the skin supple and moist. Using anti-itch creams containing a moisturizer and additional ingredients such as crotamiton, lauromacrogols, menthol, and doxepin is possible. However, their use should be based on the classification as recent evidence does not support using these products for all types of pruritus.

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

A. Splitting

B. Ambivalence

C. Passive aggression

D. Reaction formation

Correct Answer: A. Splitting

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

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

60. During a school screening program for children aged 6-12, a nurse is tasked with evaluating their growth parameters. She encounters a 9-year-old girl who is shorter than her peers and seems to have less muscle development. To align her observations with typical growth expectations for school-age children, what would the nurse expect to see?

A. Decreasing amounts of body fat and muscle mass

B. Little change in body appearance from year to year

C. Progressive height increase of 4 inches each year

D. Yearly weight gain of about 5.5 pounds per year

Correct Answer: D. Yearly weight gain of about 5.5 pounds per year

School-age children gain about 5.5 pounds each year and increase about 2 inches in height. Between ages 2 to 10 years, a child will grow at a steady pace.

- **Option A:** Decreasing amounts of body fat and muscle mass are common in toddlers.
- **Option B:** A decrease in the change in body appearance occurs among young adults.
- **Option C:** Growth spurts are common in school-age children, as are periods of slow growth.

61. Upon evaluation of the patient's record, the nurse sees the admission was voluntary. Based on this data, the nurse expects which patient behavior?

A. Fearfulness regarding treatment measures.

B. Anger and aggressiveness directed toward others.

C. An understanding of the pathology and symptoms of the diagnosis.

D. A willingness to participate in the planning of the care and treatment plan.

Correct Answer: D. A willingness to participate in the planning of the care and treatment plan.

In general, patients seek voluntary admission. If a patient seeks voluntary admission, the most likely expectation is the patient will participate in the treatment program since they are actively seeking help. There are advantages and disadvantages of being a voluntary patient. The client has greater control and say over their life. For some people, this is very important and can improve wellbeing. The client has more freedom. They are able to leave the ward when they want, within reason. They should also have less restrictions placed on them, like having their mail checked on the ward or having access to their possessions.

- **Option A:** The client can refuse treatment, including medication. This means that they can have more discussions with their care team, which leads to better understanding and they are more likely to take the medication. Dispel misconceptions and myths. These include catastrophic fears—often based on stereotypes—about coercive treatment and indefinite confinement. Clarifying what a patient can expect with voluntary admission with regard to the probable length of stay, participation in the milieu, visitation, and discharge planning is helpful for allaying such fears.
- **Option B:** Anger and aggressiveness are more characteristic of involuntary admission. Maintain an empathic stance. For many patients, psychiatric admission evokes considerable distress. Remain sensitive to the situational concerns that typically arise, such as disruption to family and job responsibilities, insurance coverage, and whether there will be an outpatient plan in place at discharge.
- **Option C:** The remaining options are not characteristics of this type of admission. Voluntary admission does not guarantee a patient's understanding of their illness, only of their desire for help. Provide a compelling rationale. Stress the need for immediate, specialized, and intensive services. If the patient is receiving outpatient mental health care, advise him that these services have been unsuccessful in achieving safety and clinical stability and that it is not possible to quickly establish a modified outpatient plan or a day hospital placement that would meet his needs. For a patient who is not receiving outpatient care, explain that it is not feasible to implement a workable plan "from the ground up" in a timely manner.

62. Which of the following should the nurse do when a primipara who is lactating tells the nurse that she has sore nipples?

A. Tell her to breastfeed more frequently.

B. Administer a narcotic before breastfeeding.

C. Encourage her to wear a nursing brassiere.

D. Use soap and water to clean the nipples.

Correct Answer: A. Tell her to breastfeed more frequently

Feeding more frequently, about every 2 hours, will decrease the infant's frantic, vigorous sucking from hunger and will decrease breast engorgement, soften the breast, and promote ease of correct latching on for feeding.

- **Option B:** Narcotics administered prior to breastfeeding are passed through the breast milk to the infant, causing excessive sleepiness. Nipple soreness is not severe enough to warrant narcotic analgesia.
- **Option C:** All postpartum clients, especially lactating mothers, should wear a supportive brassiere with wide cotton straps. They can improve posture and prevent a lot of spine problems and back pain during breastfeeding. This does not, however, prevent or reduce nipple soreness.
- **Option D:** Soaps are drying to the skin of the nipples and should not be used on the breasts of lactating mothers. Dry nipple skin predisposes to cracks and fissures, which can become sore and painful.

63. The nursing measure to relieve fetal distress due to maternal supine hypotension is:

A. Place the mother in semi-Fowler's position.

B. Put the mother on the left side-lying position.

C. Place mother on a knee-chest position.

D. Any of the above.

Correct Answer: B. Put the mother on left side-lying position.

When a pregnant woman lies in a supine position, the weight of the gravid uterus would be compressing on the vena cava against the vertebrae obstructing blood flow from the lower extremities. This causes a decrease in blood return to the heart and consequently immediate decreased cardiac output and hypotension. Hence, putting the mother on side-lying will relieve the pressure exerted by the gravid uterus on the vena cava.

- **Option A:** Placing the pregnant woman in a Semi-Fowler's position would still place the weight of the gravid uterus on the vena cava and obstruct the blood flow from the lower extremities.
- **Option C:** A pregnant woman would be incapable to perform the knee-chest position due to her gravid belly. The primary treatment used for non-reassuring fetal status is intrauterine resuscitation. This will help prevent any unnecessary procedures.

64. A 68-year-old male patient who had a left-sided stroke is admitted to the hospital. The patient has right-sided weakness and is unable to perform activities of daily living without assistance. The nurse is providing oral hygiene to the patient and is preparing to use a padded tongue blade to open the patient's mouth. Which nursing measure is inappropriate when providing oral hygiene to the patient who had a stroke?

A. Placing the client on the back with a small pillow under the head.

B. Keeping portable suctioning equipment at the bedside.

C. Opening the client's mouth with a padded tongue blade.

D. Cleaning the client's mouth and teeth with a toothbrush.

Correct Answer: A. Placing the client on the back with a small pillow under the head.

A helpless client should be positioned on the side, not on the back. This lateral position helps secretions escape from the throat and mouth, minimizing the risk of aspiration. Observe the patient for paroxysms of coughing, food dribbling out or pooling in one side of the mouth, food retained for long periods in the mouth, or nasal regurgitation when swallowing liquids.

- **Option B:** It may be necessary to suction, so having suction equipment at the bedside is necessary. Consult with a speech therapist to evaluate gag re?exes; assist in teaching alternate swallowing techniques, advise the patient to take smaller boluses of food, and inform the patient of foods that are easier to swallow; provide thicker liquids or pureed diet as indicated.
- **Option C:** Padded tongue blades are safe to use. Have the patient sit upright, preferably on chair, when eating and drinking; advance diet as tolerated. Prepare for GI feedings through a tube if indicated; elevate the head of bed during feedings, check tube position before feeding, administer feeding slowly, and ensure that the cuff of tracheostomy tube is in?ated (if applicable); monitor and report excessive retained or residual feeding.
- **Option D:** A toothbrush is appropriate to use. Encourage personal hygiene activities as soon as the patient can sit up; select suitable self-care activities that can be carried out with one hand.

65. A client with a peptic ulcer is scheduled for a vagotomy. The client asks the nurse about the purpose of this procedure. The nurse tells the client that the procedure:

A. Decreases food absorption in the stomach.

B. Heals the gastric mucosa.

C. Halts stress reactions.

D. Reduces the stimulus to acid secretions.

Correct Answer: D. Reduces the stimulus to acid secretions.

A vagotomy, or cutting the vagus nerve, is done to eliminate parasympathetic stimulation of gastric secretion. A vagotomy is a type of surgery that removes all or part of the vagus nerve. This nerve runs from the bottom of the brain, through the neck, and along the esophagus, stomach, and intestines in the gastrointestinal (GI) tract.

- **Option A:** The indications for vagotomy are few with the advancements of medical therapy. Generally, acid-reducing operations are reserved for complicated ulcer disease in a stable patient who has failed maximum medical therapy. The type of surgery performed depends on the type of ulcer (duodenal versus gastric), the complication of PUD (bleeding, perforation, obstruction, intractability), and the location of the ulcer (types I to V gastric ulcers as described by the Modified Johnson Classification system).
- **Option B:** The relevant physiology revolves around the mechanisms relating to stomach acid secretion. Intraluminal gastric acid is released by the parietal cells, mainly located in the body of the stomach. Parietal cells are stimulated via 3 mechanisms: gastrin, acetylcholine, and histamine. All 3 mechanisms activate the hydrogen-potassium ATPase-releasing hydrogen ion into the stomach lumen.
- **Option C:** Vagotomy was once commonly performed to treat and prevent PUD; however, with the availability of excellent acid secretion control with H2-receptor antagonists, proton pump inhibitors, and anti–Helicobacter pylori medications, the need for surgical management of this condition has

greatly decreased.

66. A patient comes to the emergency department with abdominal pain. Work-up reveals the presence of a rapidly enlarging abdominal aortic aneurysm. Which of the following actions should the nurse expect?

A. The patient will be admitted to the medicine unit for observation and medication.

B. The patient will be admitted to the day surgery unit for sclerotherapy.

C. The patient will be admitted to the surgical unit and resection will be scheduled.

D. The patient will be discharged home to follow-up with his cardiologist in 24 hours.

Correct Answer: C. The patient will be admitted to the surgical unit and resection will be scheduled.

A rapidly enlarging abdominal aortic aneurysm is at significant risk of rupture and should be resected as soon as possible. Abdominal aortic aneurysm (AAA) is a life-threatening condition which requires monitoring or treatment depending upon the size of the aneurysm and/or symptomatology. AAA may be detected incidentally or at the time of rupture. An arterial aneurysm is defined as a permanent localized dilatation of the vessel at least 150% compared to a relative normal adjacent diameter of that artery

- **Option A:** The patient should be admitted but not in the medicine unit. Rupture of an abdominal aortic aneurysm is life-threatening. These patients may present in shock often with diffuse abdominal pain and distension. However, the presentation of patients with this type of ruptured aneurysm can vary from subtle to quite dramatic. Most patients with a ruptured abdominal aortic aneurysm die before hospital arrival.
- **Option B:** The patient should undergo resection instead of sclerotherapy. Open surgical repair via transabdominal or retroperitoneal approach has been the gold standard. Endovascular repair from a femoral arterial approach is now applied for a majority of repairs, especially in older and higher risk patients. Endovascular therapy is recommended in patients who are not candidates for open surgery. This includes patients with severe heart disease, and/or other comorbidities that preclude open repair.
- **Option D:** The patient should not be discharged because the aneurysm may rupture. A ruptured abdominal aortic aneurysm warrants emergency repair. Endovascular approach for ruptured AAA has demonstrated superior results and survival compared to open repair if the anatomy is suitable, but the mortality rates remain high. The risk of surgery is influenced by the age of the patient, the presence of renal failure, and the status of the cardiopulmonary system.

67. Which selection would provide the most calcium for the client who is 4 months pregnant?

A. A granola bar

B. A bran muffin C. A cup of yogurt

C. A cup of yogurt

D. A glass of fruit juice

Correct Answer: C. A cup of yogurt

The food with the most calcium is the yogurt, which has approximately 400 mg of calcium. A growing baby needs a considerable amount of calcium to develop. If the mother does not consume enough calcium to sustain the needs of the developing baby, the body will take calcium from the bones, decreasing bone mass and putting the mother at risk for osteoporosis. Osteoporosis causes dramatic thinning of the bone, resulting in weak, brittle bones that can easily be broken.

- **Option A:** Eat a variety of foods to get all the nutrients you need. Recommended daily servings include 6-11 servings of breads and grains, two to four servings of fruit, four or more servings of vegetables, four servings of dairy products, and three servings of protein sources (meat, poultry, fish, eggs or nuts).Consume fats and sweets sparingly.
- **Option B:** Choose foods high in fiber that are enriched, such as whole-grain breads, cereals, beans, pasta and rice, as well as fruits and vegetables. Although it's best to get fiber from foods, taking a fiber supplement can help get the necessary amount.
- **Option D:** A glass of fruit juice is mainly rich in vitamin C and fiber. Choose at least one good source of vitamin C every day, such as oranges, grapefruits, strawberries, honeydew, papaya, broccoli, cauliflower, Brussels sprouts, green peppers, tomatoes, and mustard greens. Pregnant women need 80 – 85 mg of vitamin C a day.

68. A 2-year-old is admitted for repair of a fractured femur and is placed in Bryant's traction. Which finding by the nurse indicates that the traction is working properly?

A. The infant no longer complains of pain.

B. The buttocks are 15° off the bed.

C. The legs are suspended in the traction.

D. The pins are secured within the pulley.

Correct Answer: B. The buttocks are 15° off the bed.

The infant's hips should be off the bed approximately 15° in Bryant's traction. Bryant's traction is a form of orthopedic traction. It is mainly used in young children who have fractures of the femur or congenital abnormalities of the hip. Both the patient's limbs are suspended in the air vertically at a ninety-degree angle from the hips and knees slightly flexed. Over a period of days, the hips are gradually moved outward from the body using a pulley system. The patient's body provides the counter-traction.

- **Option A:** Absence of pain is not an indication that the traction is working properly. The child's toes and feet should be warm and pink and the toes should move when touched. Check for these signs of good circulation every four hours the first few days, every four hours after rewrapping the legs, and then whenever the child is fed, changed, or played with.
- **Option C:** The child's body and the weights are used as tension to keep the end of the femur in the hip socket. The legs are wrapped in adhesive tape attached to a gauze adhesive elastic bandage, then connected to ropes and weights.
- **Option D:** Bryant's traction is a skin traction, not a skeletal traction. Take the ace wraps (the outer elastic bandage) off the legs. Inspect any skin for redness or irritation. Rewrap the legs with the ace bandages. Start at the feet. Overlap each loop of the wrap halfway. Do not stretch it tight. Stretch with mild tension only (1/3 tight).

69. In the midst of a bustling endocrinology unit, you come across the case of Ruby, a 46-year-old female, entrenched in a long-term management plan for hypothyroidism entailing thyroid hormone replacement therapy. Recently, Ruby encountered the onslaught of a virulent flu, confining her to bed and muddling her usually meticulous medication regimen, leading to inadvertent skipping of her thyroid replacement doses for several days. Upon being admitted, her husband revealed Ruby's cognitive fog and lethargy, which he initially attributed to her viral ailment, but with growing concern, he sought medical evaluation. As the attending nurse, you meticulously chart Ruby's vital signs which reveal bradycardia and hypothermia. Your clinical acumen alerts you to the potential escalation of hypothyroidism into a life-threatening juncture due to her lapse in medication adherence amidst an acute illness. Given this narrative, your clinical understanding guides you to associate the omission of thyroid replacement medication, especially amidst an external stressor like the flu, with a risk of which of the following severe complications?

A. Thyroid storm

B. Exophthalmos

C. Tibial myxedema

D. Myxedema coma

E. Hashimoto's encephalopathy

F. Rhabdomyolysis

Correct Answer: D. Myxedema coma.
Myxedema coma is a life-threatening but rare complication of hypothyroidism that can be precipitated by acute illness, such as the flu, especially if thyroid replacement therapy is interrupted. The severe hypothyroid state can cause a metabolic and physiological standstill characterized by profound bradycardia, hypothermia, hypoventilation, and altered mental status, as seen in Ruby's presentation, making this a viable answer.

- **Option A:** Thyroid storm is a life-threatening condition typically occurring due to hyperthyroidism, not hypothyroidism. Ruby's omission of her thyroid replacement medication would likely not instigate a thyroid storm, making this choice implausible.
- **Option B:** Exophthalmos is associated with hyperthyroidism, specifically Graves' disease, and not typically a consequence of missed thyroid replacement medication in a hypothyroid individual like Ruby.
- **Option C:** While tibial myxedema is associated with severe hypothyroidism, it is not a life-threatening condition. It's a localized myxedema that occurs in the pretibial area, not typically a direct result of a few missed doses of thyroid replacement medication.
- **Option E:** Although associated with autoimmune thyroiditis, Hashimoto's encephalopathy is a rare condition and not a direct result of missing thyroid replacement doses.
- **Option F:** Rhabdomyolysis isn't a typical complication of missed thyroid replacement medication and is not directly associated with hypothyroidism.

70. The physician orders penicillin for a patient with streptococcal pharyngitis. The nurse administers the drug as ordered, and the patient has an allergic reaction. The nurse checks the medication order sheet and finds that the patient is allergic to penicillin. Legal responsibility for the error is:

A. Only the nurse's—she should have checked the allergies before administering the medication.

B. Only the physician's—she gave the order, the nurse is obligated to follow it.

C. Only the pharmacist's—he should alert the floor to possible allergic reactions.

D. The pharmacist, physician, and nurse are all liable for the mistake.

Correct Answer: D. The pharmacist, physician, and nurse are all liable for the mistake.

The physician, nurse, and pharmacist all are licensed professionals and share responsibility for errors. The legal response to medical errors that do gain legal consideration is typically dominated by one or more of three goals: compensation, accountability, and retribution. These each feature, with greater or lesser emphasis, in different national, legal, and regulatory regimes

- **Option A:** The legal response to a serious accident is usually prolonged and expensive so it is important that it actually promotes future safety. In a criminal prosecution, the emphasis is placed on establishing the culpability or otherwise of an individual, and inquiry into the underlying causes of an event is often inhibited by the strict rules of the process.
- **Option B:** The legal response to error significantly depends on the outcome. Many drug errors are made in healthcare, but only those in which harm results tend to be punished. Punishment is imposed if there are consequences rather than because of any inherent culpability underlying error.
- **Option C:** The legal response tends to be proportionate to the actual consequences of the error, rather than to potential consequences or the moral culpability involved.

71. A fragile 87-year-old female has recently been admitted to the hospital with increased confusion and falls over the last two (2) weeks. She is also noted to have a mild left hemiparesis. Which of the following tests is most likely to be performed?

A. CBC (Complete blood count)

B. ECG (electrocardiogram)

C. Thyroid function tests

D. CT scan

Correct Answer: D. CT scan

A CT scan would be performed for further investigation of the hemiparesis. Noncontrast CT scanning is the most commonly used form of neuroimaging in the acute evaluation of patients with apparent acute stroke.

- **Option A:** A complete blood count (CBC) and a basic chemistry panel can be useful baseline studies. A CBC serves as a baseline study and may reveal a cause for the stroke (eg, polycythemia, thrombocytosis, thrombocytopenia, leukemia), identify evidence of concurrent illness (eg, anemia), or issues that may affect reperfusion strategies (thrombocytopenia).

- **Option B:** Electrocardiogram may serve as baseline data upon entry into the ED. An electrocardiogram (ECG or EKG) records the electrical signal from the heart to check for different heart conditions. Electrodes are placed on the chest to record the heart's electrical signals, which cause the heart to beat. The signals are shown as waves on an attached computer monitor or printer.
- **Option C:** Testing can often be limited to blood glucose, plus coagulation studies if the patient is on warfarin, heparin, or one of the newer antithrombotic agents (eg, dabigatran, rivaroxaban), not including thyroid studies.

72. What is a characteristic of a statistical hypothesis?

A. It is a null hypothesis.

B. It predicts a positive relationship among variables.

C. It is a complex hypothesis.

D. It describes data-analysis methods.

Correct Answer: A. It is a null hypothesis.

Statistical hypotheses, called null hypotheses, state that there is no relationship between the independent and dependent variables. Hypothesis testing is used to assess the plausibility of a hypothesis by using sample data. The test provides evidence concerning the plausibility of the hypothesis, given the data.

- **Option B:** In hypothesis testing, an analyst tests a statistical sample, with the goal of providing evidence on the plausibility of the null hypothesis. Statistical analysts test a hypothesis by measuring and examining a random sample of the population being analyzed. All analysts use a random population sample to test two different hypotheses: the null hypothesis and the alternative hypothesis.
- **Option C:** The null hypothesis is usually a hypothesis of equality between population parameters; e.g., a null hypothesis may state that the population mean return is equal to zero.
- **Option D:** The alternative hypothesis is effectively the opposite of a null hypothesis (e.g., the population mean return is not equal to zero). Thus, they are mutually exclusive, and only one can be true. However, one of the two hypotheses will always be true.

73. The major cation in the ICF is:

A. Potassium

B. Sodium

C. Phosphorus

D. Magnesium

Correct Answer: A. Potassium

Potassium is the major ICF cation. 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:** Sodium is the major ECF cation. 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 C:** Phosphorus is the major ICF anion. Phosphorus is an extracellular fluid cation. Eighty-five percent of the total body phosphorus is in the bones and teeth in the form of hydroxyapatite; the soft tissues contain the remaining 15%. Phosphate plays a crucial role in metabolic pathways. It is a component of many metabolic intermediates and, most importantly of adenosine triphosphate(ATPs) and nucleotides.
- **Option D:** Magnesium is the second-most abundant cation in the ICF. Magnesium is an intracellular cation. Magnesium is mainly involved in ATP metabolism, contraction and relaxation of muscles, proper neurological functioning, and neurotransmitter release. When muscle contracts, calcium re-uptake by the calcium-activated ATPase of the sarcoplasmic reticulum is brought about by magnesium.

74. A parent brings a toddler, age 19 months, to the clinic for a regular check-up. When palpating the toddler's fontanels, what should the nurse expect to find?

A. Open anterior and fontanel and closed posterior fontanel

B. Closed anterior and posterior fontanels

C. Closed anterior fontanel and open posterior fontanel

D. Open anterior and posterior fontanels

Correct Answer: B. Closed anterior and posterior fontanels

By age 18 months, the anterior and posterior fontanels should be closed. The diamond-shaped anterior fontanel normally closes between ages 9 and 18 months. The triangular posterior fontanel normally closes between ages 2 and 3 months. Fontanelles, often referred to as "soft spots," are one of the most prominent anatomical features of the newborn's skull. Fontanelle morphology may vary between infants, but characteristically they are flat and firm.

- **Option A:** The most common conditions associated with a large anterior fontanelle or a delay in its closure are as listed: Down syndrome, achondroplasia, congenital hypothyroidism, rickets, and elevated intracranial pressures. Infants of African descent statically have larger fontanelles that range from 1.4 to 4.7 cm, and in terms of sex, the fontanelles of male infants will close sooner compared to female infants.
- **Option C:** Often, the delayed closure of the posterior fontanelle is associated with hydrocephalus or congenital hypothyroidism. Unlike the anterior fontanelle, the posterior fontanelle is triangular and completely closes within about six to eight weeks after birth. On average, the posterior fontanelle is 0.5 cm in Caucasian infants and 0.7 cm in infants of African descent.
- **Option D:** An elevated thyroid-stimulating hormone level on a newborn screening usually detects congenital hypothyroidism, but an abnormally large anterior fontanel in conjunction with an open posterior fontanel can be an early sign of the disorder. Myxedema and growth deficiency are later signs.

75. While performing a neurodevelopmental assessment on a 3-month-old infant, which of the following characteristics would be expected?

A. A strong Moro reflex.

B. A strong parachute reflex.

C. Rolling from front to back.

D. Lifting of head and chest when prone.

Correct Answer: D. Lifting of head and chest when prone

A 3-month-old infant should be able to lift the head and chest when prone.

- **Option A:** The Moro reflex typically diminishes or subsides by 3 months. The Moro reflex is a normal primitive, infantile reflex. The Moro reflex is an involuntary protective motor response against abrupt disruption of body balance or extremely sudden stimulation.
- **Option B:** The parachute reflex appears at 9 months. This reflex occurs in slightly older infants when the child is held upright and the baby's body is rotated quickly to face forward (as in falling). The baby will extend his arms forward as if to break a fall, even though this reflex appears long before the baby walks.
- **Option C:** Rolling from front to back usually is accomplished at about 5 months.

76. The nurse is performing a mental status examination on a male client diagnosed with a subdural hematoma. This test assesses which of the following?

A. Cerebellar function

B. Intellectual function

C. Cerebral function

D. Sensory function

Correct Answer: C. Cerebral function

The mental status examination assesses functions governed by the cerebrum. Some of these are orientation, attention span, judgment, and abstract reasoning. Cerebrum is the largest part of the brain and is composed of right and left hemispheres. It performs higher functions like interpreting touch, vision, and hearing, as well as speech, reasoning, emotions, learning, and fine control of movement.

- **Option A:** Cerebellar function testing assesses coordination, equilibrium, and fine motor movement. Cerebellum is located under the cerebrum. Its function is to coordinate muscle movements, maintain posture, and balance.
- **Option B:** Intellectual functioning isn't the only cerebral activity. When assessing intelligence to make decisions about individuals, attention has been paid almost exclusively to general intelligence, as reflected in a composite intelligence quotient, or IQ. That is, a single number, embodied in the IQ, is used to portray an individual's mental ability.
- **Option D:** Sensory function testing involves assessment of pain, light-touch sensation, and temperature discrimination. Assessment of sensory function helps to identify the different pathways for light touch, proprioception, vibration, and pain. Use a pinprick to evaluate pain sensation.

77. The nurse is caring for a client receiving chemotherapy when an anaphylactic reaction occurs from the medication. The nurse should take which

actions? Select all that apply.

A. Stop the medication.

B. Remove the IV line.

C. Administer Oxygen.

D. Administer epinephrine.

E. Positioned the client in a reverse Trendelenburg position.

Correct Answer: A, C, & D

During an anaphylactic reaction, the medication is immediately stopped. The nurse assesses the respiratory status and monitors the client's vital signs. The physician is contacted immediately. and an emergency medication is given such as epinephrine.

- **Option B:** The IV line is not removed because IV access is required to administer emergency IV medications.
- **Option E:** The client's head is not lowered but elevated to improve ventilation.

78. Prior to administering chlorpromazine (Thorazine) to an agitated client, the nurse should:

A. Assess skin color and sclera

B. Assess the radial pulse

C. Take the client's blood pressure

D. Ask the client to void

Correct Answer: C. Take the client's blood pressure

Because chlorpromazine (Thorazine) can cause a significant hypotensive effect (and possible client injury), the nurse must assess the client's blood pressure (lying, sitting, and standing) before administering this drug. When administered as intramuscular or intravenous injections, it may cause hypotension and headache. Prolonged use of chlorpromazine may cause corneal deposits and lens opacity. It may prolong the QT interval.

- **Option A:** If the client had taken the drug previously, the nurse would also need to assess the skin color and sclera for signs of jaundice, a possible drug side effect; however, based on the information given here, there is no evidence that the client has received chlorpromazine before.
- **Option B:** The hepatic P450 enzyme CYP2D6 metabolizes the drug, and its half-life is approximately 30 hours. It gets excreted from the body via urine and in bile. Studies have shown the correlation between chlorpromazine's therapeutic level and the improvement of the psychiatric symptoms. Researchers have noted that the patients receiving chronic treatment with chlorpromazine have lower plasma levels as compared to the patients acutely treated on an oral dose of chlorpromazine.
- **Option D:** Although the drug can cause urine retention, asking the client to avoid will not alter this anticholinergic effect. Chlorpromazine is a low-potency antipsychotic that mainly causes non-neurologic side effects. It is highly lipid-soluble and stored in body fats, thus very slow to be removed from the body. Being a low-potency typical antipsychotic, it primarily causes dry mouth, dizziness, urine retention, blurred vision, and constipation by blocking the muscarinic receptors.

There is a risk of angle-closure glaucoma in the elderly. It also causes sedation due to the blockade of histamine H1 receptors.

79. A nurse is assessing a newly admitted client. In the family assessment, who should be considered as part of the client's family? Select all that apply.

A. People related by blood or marriage

B. People whom the client views as family

C. People who live in the same house

D. People whom the nurse thinks are important to the client

E. People of the same racial background who live in the same house as the client

F. People who provide for the physical and emotional needs of the client

Correct Answer: B & F.

The term "family" is difficult to define. The mid 20th century concept of family, with heterosexual parents and offspring living under the same roof is now seldom used, and many authors now consciously use a wider definition of family. The dynamics between family members are constantly evolving and there is evidence of many diverse family types in modern western European society.

- **Option A:** Poston et al. define family as "people who think of themselves as part of the family, whether by blood or marriage or not, and who support and care for each other on a regular basis", and this definition is thought to acknowledge the diverse social arrangements that may constitute a family.
- **Option B:** When providing care to a client, the nurse should consider family members to be all the people whom the client views as family. Rather than simply defining family by a dictionary definition, each individual should look to define a family by their own standards.
- **Option C:** The traditional definition of a family has changed and may include people who may not live in the same house as the client. Many people consider friends to be as close or even closer than extended (or immediate) family. People who have lost close family members or have become removed from them may create a family unit of friends with similar interests and goals to become replacements or enhancements to a lacking family structure.
- **Option D:** Family members are defined by the client, not by the nurse. Who comprises a family is up to the people in the family themselves. People may opt to keep blood relatives in their lives, or let them go if they are toxic to their well-being. Many folks add caring and supportive people to their extended clan when they choose, deciding who belongs in their specific definition of family.
- **Option E:** In addition to a universal family definition, plenty of people consider a group of friends to be family, and many consider pets as defining members of the family unit.
- **Option F:** Family members may also include those people who provide for the physical and emotional needs of the client. The traditional definition of a family has changed and may include people not related by blood or marriage, those of a different racial background, and those who may not live in the same house as the client.

80. Clients who are suspicious primarily use projection for which purpose:

A. Deny reality.

B. To deal with feelings and thoughts that are not acceptable.

C. To show resentment towards others.

D. Manipulate others.

Correct Answer: B. To deal with feelings and thoughts that are not acceptable.

Projection is a defense mechanism where one attributes one's feelings and inadequacies to others to reduce anxiety. Projection is a defense mechanism that involves taking our own unacceptable qualities or feelings and ascribing them to other people.

- **Option A:** This is not true in all instances of projection. Denial is an outright refusal to admit or recognize that something has occurred or is currently occurring. People living with drug or alcohol addiction often deny that they have a problem, while victims of traumatic events may deny that the event ever occurred.
- **Option C:** For example, if you have a strong dislike for someone, you might instead believe that they do not like you. Projection works by allowing the expression of the desire or impulse, but in a way that the ego cannot recognize, therefore reducing anxiety.
- **Option D:** This focuses on the self rather than others. Manipulation is using others for one's own advantage as a self defense mechanism. Manipulating others to try and get people to do what is desired for personal gain usually backfires eventually.

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

A. Conversion disorder

B. Hypochondriasis

C. Severe anxiety

D. Sublimation

Correct Answer: B. Hypochondriasis

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

- **Option A:** Conversion disorders are characterized by one or more neurologic symptoms. Conversion disorder is a mental condition in which a person has blindness, paralysis, or other nervous system (neurologic) symptoms that cannot be explained by medical evaluation. People who have conversion disorder are not making up their symptoms in order to obtain shelter, for example (malingering). They are also not intentionally injuring themselves or lying about their symptoms just to become a patient (factitious disorder). Some health care providers falsely believe that conversion disorder is not a real condition and may tell people that the problem is all in their head. But this condition is real. It causes distress and cannot be turned on and off at will.

- **Option C:** The client's symptoms don't suggest severe anxiety. People with anxiety disorders frequently have intense, excessive and persistent worry and fear about everyday situations. Often, anxiety disorders involve repeated episodes of sudden feelings of intense anxiety and fear or terror that reach a peak within minutes (panic attacks).
- **Option D:** A client experiencing sublimation channels maladaptive feelings or impulses into socially acceptable behavior. Transforming one's anxiety or emotions into pursuits that are considered by societal or cultural norms to be more useful. This defense mechanism may be present in someone who channels their aggression and energy into playing sports.

82. The nurse is aware that a healthy newborn's respirations are:

A. Regular, abdominal, 40-50 per minute, deep

B. Irregular, abdominal, 30-60 per minute, shallow

C. Irregular, initiated by chest wall, 30-60 per minute, deep

D. Regular, initiated by the chest wall, 40-60 per minute, shallow

Correct Answer: B. Irregular, abdominal, 30-60 per minute, shallow.

- **Option B:** Normally the newborn's breathing is abdominal and irregular in-depth and rhythm; the rate ranges from 30-60 breaths per minute.

83. Ralph has a history of alcohol abuse and has acute pancreatitis. Which lab value is most likely to be elevated?

A. Calcium

B. Glucose

C. Magnesium

D. Potassium

Correct Answer: B. Glucose

Glucose level increases and diabetes mellitus may result d/t the pancreatic damage to the islets of Langerhans. Acute pancreatitis is associated with damage to both the endocrine and exocrine pancreas. Glucose intolerance seen with this disease appears to be the result of hyperglucagonemia and relative hypoinsulinemia.

- **Option A:** Initial evaluation of suspected acute pancreatitis involves laboratory abnormalities suggesting biliary cholestasis, hypercalcemia or severe hyperlipidemia will help in determining the etiology of pancreatitis. An abdominal ultrasound is recommended in all the patients to assess for choledocholithiasis and bile duct dilatation.
- **Option C:** The diagnosis of acute pancreatitis has been defined by the Revised Atlanta Classification and requires at least 2 of 3 criteria be met: 1) a lipase or amylase level that is three times the upper limit of normal 2) abdominal pain that is consistent with pancreatitis 3) abdominal imaging consistent with acute pancreatitis.
- **Option D:** A thorough history regarding alcohol use and medications should be gathered, keeping in mind that over five years of heavy alcohol use is often needed to induce alcohol-related pancreatitis. Smoking history is also important as a risk factor for acute pancreatitis.

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

A. We will bring in books and magazines for entertainment.

B. We will bring in personal care items for comfort.

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

D. We will bring in family pictures and get well cards.

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

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

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

85. Which of the following may be used for bowel preparation and is not recommended for the treatment of constipation?

A. Correctol

B. Fiberall

C. Mineral oil

D. Castor oil

Correct Answer: D. castor oil

Castor oil is not recommended for treatment of constipation because it causes such severe abdominal pain. Castor oil can be used as an irritant/stimulative laxative. Castor oil is a natural emollient and a few

drops may also be used to remedy dry skin, as a massage oil, and may benefit hair as a treatment. Castor oil contains ricinoleic acid, a fatty acid that comprises about 90% of the oil.

- **Option A:** Bisacodyl is used to treat constipation. It may also be used to clean out the intestines before a bowel examination/surgery. Bisacodyl is known as a stimulant laxative. It works by increasing the movement of the intestines, helping the stool to come out.
- **Option B:** This medication is used to treat constipation. It increases the bulk in your stool, an effect that helps to cause movement of the intestines. It also works by increasing the amount of water in the stool, making the stool softer and easier to pass. Psyllium, one type of bulk-forming laxative, has also been used along with a proper diet to treat high cholesterol.
- **Option C:** Mineral oil is used to treat constipation. It is known as a lubricant laxative. It works by keeping water in the stool and intestines. This helps to soften the stool and also makes it easier for stool to pass through the intestines.

86. One staff suggests that they review the pattern of nursing care that they are using, which is described as a:

A. Job description

B. System used to deliver care

C. Manual of procedure

D. Rules to be followed

Correct Answer: B. System used to deliver care

A system used to deliver care. In the 70's it was termed as methods of patient assignment; in the early 80's it was called modalities of patient care then patterns of nursing care in the '90s until recently authors called it nursing care systems. Ideally, nursing care delivery models match the number and type of caregivers to patient care needs determine who is going to perform what tasks, who is responsible, and who makes decisions and detail assignments, responsibilities, and authority to accomplish patient care.

- **Option A:** A job description or JD lists the main features of a specific job. The description typically includes the person's main duties, responsibilities, and working conditions. It also includes the job title and to whom the person holding that job has to report.
- **Option C:** A procedure manual contains the institution's best practices that define the systematic approach to implementing policy expectations, plans, and work routines — also known as procedures.
- **Option D:** Rules can be described as the guidelines or instructions for doing something correctly. these are the principles that govern the conduct or behavior of a person in an organization or country. On the other hand, regulations refer to the directives or statutes enforced by law, in a particular country.

87. Etiologies associated with hypocalcemia may include all of the following except:

A. Renal failure

B. Inadequate intake calcium

C. Metastatic bone lesions

D. Vitamin D deficiency

Correct Answer: C. Metastatic bone lesions

Metastatic bone lesions are associated with hypercalcemia due to accelerated bone metabolism and release of calcium into the serum. Although more common in adults than pediatric patients, the next important etiology to consider is malignancy. Renal carcinomas, leukemias, lymphomas, and rhabdomyosarcoma can be associated with elevated calcium levels mediated by the action of PTH-related peptides. Renal failure, inadequate calcium intake, and vitamin D deficiency may cause hypocalcemia.

- **Option A:** CKD leads to impaired phosphate excretion which drives PTH secretion and can cause secondary hyperparathyroidism. However, due to impaired Vitamin D metabolism and high phosphorus level, the serum calcium remains low despite the high PTH.
- **Option B:** Serum calcium is normally bound to proteins in the blood most prominently albumin and therefore low albumin states can give a falsely low total serum calcium level. Ionized calcium level is usually normal in these states and thus a correction of adding 0.8 mg/dL to serum calcium level is usually recommended for every 1gm drop in serum albumin below normal (4 gm/dL)
- **Option D:** Absolute or relative Vitamin D deficiency includes lack of active metabolite of vitamin D due to inadequate sun exposure or liver disease or kidney disease. Also, included in this category are familial causes of vitamin D resistance.

88. A female client with a history of pheochromocytoma is admitted to the hospital in an acute hypertensive crisis. To reverse hypertensive crisis caused by pheochromocytoma, nurse Lyka expects to administer:

A. mannitol (Osmitrol)

B. methyldopa (Aldomet)

C. phentolamine (Regitine)

D. felodipine (Plendil)

Correct Answer: C. phentolamine (Regitine)

Pheochromocytoma causes excessive production of epinephrine and norepinephrine, natural catecholamines that raise the blood pressure. Phentolamine, an alpha-adrenergic blocking agent given by I.V. bolus or drip, antagonizes the body's response to circulating epinephrine and norepinephrine, reducing blood pressure quickly and effectively.

- **Option A:** Mannitol, a diuretic, isn't used to treat hypertensive emergencies. Mannitol can be used for the reduction of intracranial pressure and brain mass, to reduce intraocular pressure if this is not achievable by other means, to promote diuresis for acute renal failure to prevent or treat the oliguric phase before irreversible damage, and to promote diuresis to promote excretion of toxic substances, materials, and metabolites.
- **Option B:** Although methyldopa is an antihypertensive agent available in parenteral form, it isn't effective in treating hypertensive emergencies. Methyldopa is a medication used in the management and treatment of hypertension. It is in the centrally acting anti-hypertensive class of drugs.
- **Option D:** Felodipine, an antihypertensive agent, is available only in extended-release tablets and therefore doesn't reduce blood pressure quickly enough to correct hypertensive crisis. Felodipine is

an agent in the dihydropyridine class of calcium channel blockers. Felodipine is FDA approved and indicated in the treatment of essential hypertension. Reduction in blood pressure lowers the risk of cardiovascular morbidity and mortality.

89. The mother of a 14-month-old child reports to the nurse that her child will not fall asleep at night without a bottle of milk in the crib and often wakes during the night asking for another. Which of the following instructions by the nurse is correct?

A. Allow the child to have the bottle at bedtime, but withhold the one later in the night.

B. Put juice in the bottle instead of milk.

C. Give only a bottle of water at bedtime.

D. Do not allow bottles in the crib.

Correct Answer: C. Give only a bottle of water at bedtime.

Babies and toddlers should not fall asleep with bottles containing liquid other than plain water due to the risk of dental decay. Wean one ounce a night. Let's say the child takes three 4 oz bottles a night. Take the last bottle and reduce it by an oz on night one. On night 2, reduce bottle 2 by 1 oz. On night 3 reduce Bottle #1 by 1 oz. When a bottle gets down to 2 oz, substitute a bottle of water. After this step, get rid of the bottle. Don't ever wake up the child if they sleep through a feeding– that is the goal.

- **Option A:** If they skip a feeding one night but wake up the following night for that feeding, it is OK to give them the scheduled bottle. Limit the water bottles to 2 oz, simply to reduce the amount of urine produced and wet diapers to deal with. If the child doesn't want the water, that is fine. But don't give in and give the milk.
- **Option B:** Sugars in juice remain in the mouth during sleep and cause caries, even in teeth that have not yet erupted. Make slow incremental changes over time. These changes are relatively easy to make and the child will tolerate them well.
- **Option D:** The child could have a bottle of water in the crib with close supervision. Bottle fed infants typically can wean off night feeding by 6 months of age. Breast fed infants tend to take longer, up to a year of age. The American Academy of Pediatrics recommends exclusive breastfeeding for six months, with the addition of complementary foods continuing up to a year, or longer "as desired by mother and infant". It's important to note that night weaning can lead to weaning altogether.

90. When caring for a 3-year-old child, the nurse should provide which toys for this child? Select all that apply.

A. A puzzle

B. A wagon

C. A golf set

D. A farm set

E. A doll

F. A lightweight ball

Correct Answer: B, E, & F.

Toys for the toddler must be strong, safe, and too large to swallow or place in the ear or nose. Toddlers need supervision at all times. Push-pull toys, large balls, large crayons, trucks, and dolls are some appropriate toys.

- **Option A:** A puzzle with large pieces only may be appropriate. Wood puzzles with only 4 to 12 large pieces aid in the toddler's development of critical thinking. Other appropriate toys may be blocks that snap together, objects to sort, and things with hooks, buttons, buckles, and snaps.
- **Options C and D:** A farm set and a golf set may contain items that the child could swallow. These kinds of toys are appropriate for preschoolers who like pretending and building. Preschoolers have a longer attention span than toddlers.
- **Options B and F:** Toys that make the use of large and small muscles are also appropriate for toddlers to develop their gross motor skills. This may include large or small balls for kicking and throwing, ride-on equipment, push and pull toys such as wagons, and low climbers with soft material underneath.
- **Option E:** A doll with accessories will catch the attention of a toddler too, as well as child-sized furniture, dress-up clothes, puppets, and sand and water play toys.

91. Studies have shown that about 40% of patients fall out of bed despite the use of side rails; this has led to which of the following conclusions?

A. Side rails are ineffective.

B. Side rails should not be used.

C. Side rails are a deterrent that prevent a patient from falling out of bed.

D. Side rails are a reminder to a patient not to get out of bed.

Correct Answer: D. Side rails are a reminder to a patient not to get out of bed.

Since about 40% of patients fall out of bed despite the use of side rails, side rails cannot be said to prevent falls; however, they do serve as a reminder that the patient should not get out of bed. A process that requires ongoing patient evaluation and monitoring will result in optimizing bed safety. Many patients go through a period of adjustment to become comfortable with new options. Patients and their families should talk to their health care planning team to find out which options are best for them.

- **Option A:** Patients who have problems with memory, sleeping, incontinence, pain, uncontrolled body movement, or who get out of bed and walk unsafely without assistance, must be carefully assessed for the best ways to keep them from harm, such as falling. Assessment by the patient's health care team will help to determine how best to keep the patient safe.
- **Option B:** Historically, physical restraints (such as vests, ankle or wrist restraints) were used to try to keep patients safe in health care facilities. In recent years, the health care community has recognized that physically restraining patients can be dangerous. Although not indicated for this use, bed rails are sometimes used as restraints. Regulatory agencies, health care organizations, product manufacturers, and advocacy groups encourage hospitals, nursing homes, and home care providers to assess patients' needs and to provide safe care without restraints.
- **Option C:** Anticipate the reasons patients get out of bed such as hunger, thirst, going to the bathroom, restlessness, and pain; meet these needs by offering food and fluids, scheduling ample toileting, and providing calming interventions and pain relief. When bed rails are used, perform an on-going assessment of the patient's physical and mental status; closely monitor high-risk patients.

92. A male client undergoes a laryngectomy to treat laryngeal cancer. When teaching the client how to care for the neck stoma, the nurse should include which instruction?

A. “Keep the stoma dry.”

B. “Keep the stoma moist.”

C.“Keep the stoma uncovered.”

D. “Have a family member perform stoma care initially until you get used to the procedure.”

Correct Answer: B. “Keep the stoma moist.”

- **Option B:** The nurse should instruct the client to keep the stoma moist, such as by applying a thin layer of petroleum jelly around the edges, because a dry stoma may become irritated.
- **Option A:** Moisture is needed by the stoma to keep the airway moist. The skin around the stoma is kept clean and dry instead.
- **Option C:** The nurse should recommend placing a stoma bib over the stoma to filter and warm air before it enters the stoma.
- **Option D:** The client should begin performing stoma care without assistance as soon as possible to gain independence in self-care activities.

93. Before birth, which of the following structures connects the right and left auricles of the heart?

A. Umbilical vein

B. Foramen ovale

C. Ductus arteriosus

D. Ductus venosus

Correct Answer: B. Foramen ovale

The foramen ovale is an opening between the right and left auricles (atria) that should close shortly after birth so the newborn will not have a murmur or mixed-blood traveling through the vascular system.

- **Option A:** The umbilical vein carries oxygenated, nutrient-rich blood from the placenta to the fetus, and the umbilical arteries carry deoxygenated, nutrient-depleted blood from the fetus to the placenta. Any impairment in blood flow within the cord can be a catastrophic event for the fetus.
- **Option C:** At birth, the lungs fill with air with the first breaths, pulmonary vascular resistance drops, and blood flows from the right ventricle to the lungs for oxygenation. The increased arterial oxygen tension and the decreased flow through the ductus arteriosus allow the ductus to constrict.
- **Option D:** In utero, the ductus venosus connects the left portal vein to the inferior vena cava, allowing a portion of the venous blood to bypass the liver and return to the heart. After birth, the ductus venosus generally closes between days of life 2 to 18 in term infants

94. Situation: Clients with personality disorders have difficulties in their social and occupational functions. Clients with a personality disorder will most likely:

A. Recover with therapeutic intervention.

B. Respond to anti anxiety medication.

C. Manifest enduring patterns of inflexible behaviors.

D. Seek treatment willingly from some personally distressing symptoms.

Correct Answer: C. Manifest enduring patterns of inflexible behaviors.

Personality disorders are characterized by inflexible traits and characteristics that are lifelong. Each is a distinct mental illness defined by personality traits that can be troubling enough to create problems with relating to other people in healthy ways, and can lead to significant distress or impairment in important areas of functioning.

- **Option A:** Compared to mood disorders such as clinical depression and bipolar disorder, there have historically been relatively few studies on how to effectively treat personality disorders. Many experts believe that personality disorders are difficult to treat because they are, by definition, long-standing patterns of personality. However, there are an increasing number of evidence-based treatments that are being found effective for personality disorders.
- **Option B:** Medications are generally not recommended for personality disorders. The National Alliance on Mental Illness (NAMI) lists several types of psychotherapy that may be useful in the treatment of personality disorders: Cognitive behavior therapy (CBT), the goal of which as stated by NAMI is "to recognize negative thoughts and learn effective coping strategies." Mentalization-based therapy (MBT), which teaches people to notice and reflect on their internal states of mind and those of others. Psychodynamic therapy, which places a large emphasis on the unconscious mind, where upsetting feelings, urges, and thoughts that are too painful for us to directly look at are housed.
- **Option D:** This disorder is manifested by life-long patterns of behavior. The client with this disorder will not likely present himself for treatment unless something has gone wrong in his life so he may not recover from therapeutic intervention.

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

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

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

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

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

Correct Answer: C. "I'm looking forward to leaving here. I know that I will miss all of you. So, I'm happy and I'm sad, I'm excited and I'm scared. I know that I have to work hard to be strong and

that everyone isn't going to be as helpful as you people."

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

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

96. A female client has a neurological deficit involving the limbic system. Specific to this type of deficit, the nurse would document which of the following information related to the client's behavior.

A. Is disoriented to person, place, and time.

B. Affect is flat, with periods of emotional lability.

C. Cannot recall what was eaten for breakfast today.

D. Demonstrate inability to add and subtract; does not know who is the president.

Correct Answer: B. Affect is flat, with periods of emotional lability.

The limbic system is responsible for feelings (affect) and emotions. While the limbic system was initially suggested to be the sole neurological system involved in regulating emotion, it is now considered only one part of the brain to regulate visceral, autonomic processes. In general, the limbic system assists in various processes relating to cognition; including spatial memory, learning, motivation, emotional processing, and social processing.

- **Option A:** The cerebral hemispheres, with specific regional functions, control orientation. The frontal lobe further divides into a superior, middle, and inferior frontal gyrus, primary motor cortex, and orbital area. These areas combine to control our executive and motor functions. It controls judgment, problem-solving, planning, behavior, personality, speech, writing, speaking, concentration, self-awareness, and intelligence. The parietal lobe is posterior to the central sulcus

and anterior to the parieto-occipital sulcus. This lobe controls perception and sensation. The occipital lobe is posterior to the parieto-occipital sulcus and superior to the tentorium cerebelli. This lobe interprets vision, distance, depth, color, and facial recognition. The temporal lobe is inferior to the lateral fissure and further divides into a superior, middle, and inferior temporal gyrus. This lobe controls language comprehension, hearing, and memory.

- **Option C:** Recall of recent events is controlled by the hippocampus. The hippocampus, parahippocampal region of the medial temporal lobe, and the neocortical association have been shown through the autopsy and imaging studies to be essential for memory processing. Impairment of short-term memory leading up to an inability to form new memories occurs when there is bilateral damage to the above-mentioned regions.
- **Option D:** Calculation ability and knowledge of current events relates to the function of the frontal lobe. The frontal lobe further divides into a superior, middle, and inferior frontal gyrus, primary motor cortex, and orbital area. These areas combine to control our executive and motor functions. It controls judgment, problem-solving, planning, behavior, personality, speech, writing, speaking, concentration, self-awareness, and intelligence.

97. As an initial step in treating a client with angina, the physician prescribes nitroglycerin tablets, 0.3mg given sublingually. This drug's principal effects are produced by:

A. Antispasmodic effect on the pericardium.

B. Causing an increased myocardial oxygen demand.

C. Vasodilation of peripheral vasculature.

D. Improved conductivity in the myocardium.

Correct Answer: C. Vasodilation of peripheral vasculature

Nitroglycerin produces peripheral vasodilation, which reduces myocardial oxygen consumption and demand. Vasodilation in coronary arteries and collateral vessels may also increase blood flow to the ischemic areas of the heart. Nitroglycerin is a vasodilatory drug used primarily to provide relief from anginal chest pain. It is currently FDA approved for the acute relief of an attack or acute prophylaxis of angina pectoris secondary to coronary artery disease.

- **Option A:** Although nitroglycerin has a vasodilatory effect in both arteries and veins, the profound desired effects caused by nitroglycerin are primarily due to venodilation. Venodilation causes pooling of blood within the venous system, reducing preload to the heart, which causes a decrease in cardiac work, reducing anginal symptoms secondary to demand ischemia.
- **Option B:** Nitroglycerin decreases myocardial oxygen demand. Arterial vasodilation will still occur as well and contribute towards the relief of anginal symptoms, but its effects are not as significant. Vasodilation of the coronary arteries will cause increased blood flow to the heart, increasing perfusion, but this effect remains minimal compared to the effects of venodilation.
- **Option D:** Nitroglycerin does not have an effect on pericardial spasticity or conductivity in the myocardium. Similar to other nitrates used to treat anginal chest pain, nitroglycerin converts to nitric oxide (NO) in the body. NO then activates the enzyme guanylyl cyclase, which converts guanosine triphosphate (GTP) to guanosine 3′,5′-monophosphate (cGMP) in vascular smooth muscle and other tissues. cGMP then activates many protein kinase-dependent phosphorylations, ultimately resulting in the dephosphorylation of myosin light chains within smooth muscle fibers. This activity causes the relaxation of smooth muscle within blood vessels, resulting in the desired vasodilatory effect.

98. Methylphenidate (Ritalin) is prescribed to an 8-year-old child for the treatment of attention deficit hyperactivity disorder (ADHD). The nurse will most likely monitor which of the following during the medication therapy?

A. Deep tendon reflex

B. Intake and output

C. Temperature and breath sound

D. Height and weight

Correct Answer: D. Height and weight

Methylphenidate (Ritalin) is a central nervous system stimulant that is used to treat attention deficit hyperactivity disorder (ADHD). This medication may cause slow growth. The nurse will need to keep track of the client's height and weight to make sure that there is normal growth and development.

99. A client is sent to the psychiatric unit for forensic evaluation after he is accused of arson. His tentative diagnosis is antisocial personality disorder. In reviewing the client's record, the nurse would expect to find:

A. A history of consistent employment

B. A below-average intelligence

C. A history of cruelty to animals

D. An expression of remorse for his actions

Correct Answer: C. A history of cruelty to animals

- Option C: A history of cruelty to people and animals, truancy, and setting fires with a diagnosis of conduct disorder in children, which becomes a diagnosis of antisocial personality disorder in adults.
- Option A: A client with an antisocial personality disorder does not hold consistent employment.
- Option B: IQ is usually higher than average.
- Option D: A client with antisocial personality disorder lacks guilt or remorse for wrong-doing.

100. The nurse should teach the community that a minor burn injury could be caused by what common occurrence?

A. Chimney sweeping every year

B. Cooking with a microwave oven

C. Use of sunscreen agents

D. Use of space heaters

Correct Answer: D. Use of space heaters

Minor burns are common occurrences. The use of space heaters can cause a fire if clothing, bedding, and other flammable objects are near them. Make sure to always keep anything that gives off heat at

least 3 feet away from flammable materials or items.

- **Option A:** Chimneys should be swept each year to prevent creosote build-up and resultant fire. If there is a fireplace, make sure the chimney is checked and cleaned by a professional once a year. Use a metal or glass screen that is large enough to prevent escaping embers.
- **Option B:** Burn injuries do not commonly occur from microwave cooking, but rather when taking food from it. Thermal burns are skin injuries caused by excessive heat, typically from contact with hot surfaces, hot liquids, steam, or flame. Most burns are minor and patients can be treated as outpatients or at local hospitals.
- **Option C:** Lastly, sunscreen agents are recommended to prevent sunburn. A broad-spectrum sunscreen with an SPF of at least 30 should be applied 30 minutes before sun exposure and every 90 minutes after that.