Kevin's Review - 100 NCLEX Practice Questions

1. Kelly, a first-time mother, went to the community clinic and asked the nurse what kind of toy would be most appropriate for her 15th-month-old child?

A. Knitting knits

B. Board games

C. Ball Popper Toys

D. Checkers

Correct Answer: C. Ball popper toys

At 15 months, the child's cognitive development and fine motor skills are growing so provide toys that have cause and effect such as ball popper toys. Their ability to successfully manipulate smaller and smaller objects can place them at risk of choking or swallowing dangerous items.

- **Option A:** School-age children acquire adult-like interests, abilities, and hobbies and may display a passion by becoming a collector. Girls still love doing crafts and writing in diaries, and boys find a computer and video games irresistible.
- **Option B:** School-age is the age when kids often become huge fans of computer games, but they also enjoy having their friends over to play sports, card games, and board games.
- **Option C:** Checkers is appropriate for school-age children and they require a good amount of concentration that a 15th-month-old is not yet ready to have.

2. 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.

3. Codeine sulfate is prescribed to a client with a severe back pain. Which of the following side effect is associated with this medication?

A. Hypertension

B. Urinary frequency

C. Constipation

D. Hyperactivity

Correct Answer: C. Constipation

Codeine Sulfate is an opioid analgesic indicated for the relief of mild to moderately severe pain. Side effects include drowsiness, lightheadedness, dizziness, sedation, shortness of breath, nausea, vomiting, sweating, and constipation.

4. Katrina is diagnosed with lactose intolerance. To avoid complications with lack of calcium in the diet, which food should be included in the diet?

A. Fruit

B. Whole grains

C. Milk and cheese products

D. Dark green, leafy vegetables

Correct Answer: D. Dark green, leafy vegetables

Dark green, leafy vegetables are rich in calcium. Vegetables high in calcium include rhubarb, spinach, broccoli, and certain greens like kale. For example, one cup of cooked spinach has about 250 mg of calcium. Other foods for a lactose intolerance diet include pinto beans and calcium-fortified orange juice.

- **Option A:** Keep in mind that lactose-free products made from milk should be avoided by those with a dairy allergy, as they may contain milk proteins like casein or whey. Many healthy foods can easily fit into a lactose-free diet, including fruits, vegetables, whole grains, nuts, seeds, and legumes.
- **Option B:** Most fruits, vegetables, grains, and meats are lactose-free. These foods may contain lactose if prepared with milk-based ingredients (e.g. cream sauces, cheese sauces, bread made with milk, breaded and battered meats, etc).
- **Option C:** Fermented cheeses have less lactose than other dairy products, and the patient may be able to tolerate them in small amounts. They are worth including in a lactose intolerance diet because they are good sources of calcium and protein.

5. Teaching has been adequate when a client being treated with acetylsalicylic acid states: “I can crush the pills before I swallow them.”

A. "I can crush the pills before I swallow them."

B. "I should take the pills with antacids."

C. "Taking the pills on an empty stomach will help absorption."

D. "If the pills smell like vinegar, I should throw them out."

Correct Answer: D. “If the pills smell like vinegar, I should throw them out.”

Any aspirin should be discarded if a vinegar odor is noticed. Aspirin reacts slowly with water to give salicylic acid and acetic acid. The green line shows the ester bond that is broken during the hydrolysis reaction. So, when you open an old bottle of aspirin it is common to smell the vinegar. This means that at least some of the aspirin has degraded.

- **Option A:** Crushing is not recommended for sustained-release preparations. Aspirin absorption from the gastrointestinal (GI) tract depends on the formulation state. When consumed as a liquid preparation, it is rapidly absorbed as opposed to tablets. Its hydrolysis yields salicylic acid. Salicylic acid has a narrow therapeutic window. If maintained within that narrow range, it provides the appropriate anti-inflammatory effect.
- **Option B:** Antacids impair absorption. Aspirins absorption is pH sensitive at the level of the small intestine. Absorption is higher through the small intestine than the stomach for the same pH range. At pH 3.5 or 6.5, aspirin’s intestinal absorption is greater than the gastric absorption of the compound. The stomach does not absorb aspirin at pH 6.5.
- **Option C:** Taking the medication on an empty stomach will increase GI irritation. Aspirin increases the risk of GI bleeding in patients who already suffer from peptic ulcer disease or gastritis. The risk of bleeding is still present even without these conditions if there is concomitant consumption of alcohol or if the patient is on warfarin.

6. A nurse caring for several patients in the cardiac unit is told that one is scheduled for implantation of an automatic internal cardioverter-defibrillator. Which of the following patients is most likely to have this procedure?

A. A patient admitted for myocardial infarction without cardiac muscle damage.

B. A postoperative coronary bypass patient, recovering on schedule.

C. A patient with a history of ventricular tachycardia and syncopal episodes.

D. A patient with a history of atrial tachycardia and fatigue.

Correct Answer: C. A patient with a history of ventricular tachycardia and syncopal episodes.

An automatic internal cardioverter-defibrillator delivers an electric shock to the heart to terminate episodes of ventricular tachycardia and ventricular fibrillation. This is necessary in a patient with significant ventricular symptoms, such as tachycardia resulting in syncope. Indications are usually secondary where the patient has already suffered and survived cardiac arrest due to ventricular fibrillation/ventricular tachycardia, or primary when the patient is at high risk of sudden cardiac death due to VF/ VT but has never had any such event.

- **Option A:** A patient with myocardial infarction that resolved with no permanent cardiac damage would not be a candidate. ICD is a state of the art device that treats arrhythmias specifically those

of ventricular origin like ventricular tachycardia and fibrillation. It has become the first line of defense in patients who are at high risk for sudden cardiac death (SCD) and has shown consistent survival benefit in cardiac arrest survivors (SCA), in patients with Heart failure and severe systolic dysfunction (left ventricular ejection fraction-LVEF less than or equal to 35%) as well as in patients with hypertrophic cardiomyopathy (HCM).

- **Option B:** A patient recovering well from coronary bypass would not need the device. ICD is essentially a pacemaker with the ability to recognize abnormally fast cardiac rhythm and provide immediate treatment which can be in the form of overdrive pacing called anti-tachycardia Pacing (ATP) or shock therapy which could be synchronized or unsynchronized, depending on the recognized rhythm and the pre-programmed rhythm detection algorithm.
- **Option D:** Atrial tachycardia is less serious and is treated conservatively with medication and cardioversion as a last resort. Secondary prophylaxis usually involves the event of cardiac arrest due to ventricular fibrillation (VF) or hemodynamically unstable, also known as pulseless, ventricular tachycardia (VT). Adequate workup and exclusion of reversible causes should be done first before deciding to put the device in, as is endorsed by the guidelines laid down by Heart Rhythm Society (HRS) and American College of Cardiology (ACC).

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

A. Sims position

B. Supine position

C. Semi-fowlers position

D. Dorsal recumbent position

Correct Answer: C. Semi-fowlers position

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

- **Option A:** Placing the client in a Sims position could let the stomach contents spill out of the perforation. Tachycardia and abdominal tenderness with rigidity are common clinical signs. Severe pain, systemic inflammatory response from chemical peritonitis, and fluid deficit either due to poor intake or vomiting or pyrexia lead to compensatory tachycardia.
- **Option B:** The supine position could aggravate the pain of the ulcer. PPU is a surgical emergency associated with high mortality if left untreated. In general, all patients with PPU require prompt resuscitation, intravenous antibiotics, analgesia, proton pump inhibitor medications, nasogastric tube, urinary catheter, and surgical source control.
- **Option D:** Placing the patient in a dorsal recumbent position would put pressure on the stomach contents and still aggravate the pain. When PUD worsens and eventually perforate, gastric juice and gas enter the peritoneal cavity leading to chemical peritonitis. Sudden onset of abdominal pain or acute deterioration of the ongoing abdominal pain is typical of PPU. Typically the pain never completely subsides despite usual premedical remedies and forces the patient to seek medical attention.

8. You are assigned to provide nursing care for a patient receiving mechanical ventilation. Which action should you delegate to an experienced nursing assistant?

A. Assessing the patient's respiratory status every 4 hours

B. Taking vital signs and pulse oximetry readings every 4 hours

C. Checking the ventilator settings to make sure they are as prescribed

D. Observing whether the patient's tube needs suctioning every 2 hours

Correct Answer: B. Taking vital signs and pulse oximetry readings every 4 hours

The nursing assistant's educational preparation includes measurement of vital signs, and an experienced nursing assistant would know how to check oxygen saturation by pulse oximetry. The staff members' levels of education, knowledge, past experiences, skills, abilities, and competencies are also evaluated and matched with the needs of all of the patients in the group of patients that will be cared for.

- **Option A:** Delegation should be done according to the differentiated practice for each of the staff members. Some needs require high levels of professional judgment and skill; and other patient needs are somewhat routine and without the need for high levels of professional judgment and skill.
- **Option C:** Assessing and observing the patient, as well as checking ventilator settings, require the additional education and skills of the RN. The scope of practice for the registered nurse will most likely include the legal ability of the registered professional nurse to perform all phases of the nursing process including assessment, nursing diagnosis, planning, implementation and evaluation.
- **Option D:** Among the tasks that cannot be legally and appropriately delegated to nonprofessional, unlicensed assistive nursing personnel, such as nursing assistants, patient care technicians, and personal care aides, include assessments, nursing diagnosis, establishing expected outcomes, evaluating care and any and all other tasks and aspects of care including but not limited to those that entail sterile technique, critical thinking, professional judgment and professional knowledge.

9. 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.

10. A 38-year-old male patient visits a healthcare clinic with complaints of a severe sore throat, nasal congestion, and a general feeling of malaise for the past three days. He mentions a history of recurrent upper respiratory infections. The nurse practitioner, suspecting a possible infection affecting the pharyngeal region, decides to systematically examine the divisions of the pharynx to identify the source of inflammation and discomfort. Turning to a nursing intern shadowing her for the day, she poses a quick question to test her understanding, "Given the patient's complaints and our need for a structured examination, can you tell me the correct sequence in which we should assess the divisions of the pharynx from superior to inferior?"

A. Oropharynx, Nasopharynx, Laryngopharynx

B. Nasopharynx, Oropharynx, Laryngopharynx

C. Laryngopharynx, Nasopharynx, Oropharynx

D. Nasopharynx, Laryngopharynx, Oropharynx

Correct Answer: B. Nasopharynx, Oropharynx, Laryngopharynx

The nasopharynx is the superior part of the pharynx. It is located posterior to the choanae and superior to the soft palate, which is an incomplete muscle and connective tissue partition separating the nasopharynx from the oropharynx. The oropharynx extends from the uvula to the epiglottis, and the oral cavity opens into the oropharynx. Thus, food, drink, and air all pass through the oropharynx. The laryngopharynx passes posterior to the larynx and extends from the tip of the epiglottis to the esophagus. Food and drink pass through the laryngopharynx to the esophagus.

11. Which of the following suggestions should the nurse offer the parents of a 4-year-old boy who resists going to bed at night?

A. "Allow him to fall asleep in your room, then move him to his own bed."

B. "Tell him that you will lock him in his room if he gets out of bed one more time."

C. "Encourage active play at bedtime to tire him out so he will fall asleep faster."

D. "Read him a story and allow him to play quietly in his bed until he falls asleep."

Correct Answer: D. “Read him a story and allow him to play quietly in his bed until he falls asleep.”

Preschoolers commonly have fears of the dark, being left alone especially at bedtime, and ghosts, which may affect the child’s going to bed at night. Quiet play and time with parents is a positive bedtime routine that provides security and also readies the child for sleep.

- **Option A:** The child should sleep in his own bed.
- **Option B:** Telling the child about locking him in his room will be viewed by the child as a threat. Additionally, a locked door is frightening and potentially hazardous.
- **Option C:** Vigorous activity at bedtime stirs up the child and makes it more difficult to fall asleep.

12. A nurse is caring for a client with a hiatal hernia. The client complains of abdominal and sternal pain after eating. The pain makes it difficult for the client to sleep. Which instructions should the nurse recommend when teaching this client? Select all that apply.

A. Avoid constrictive clothing.

B. Lie down for 30 minutes after eating.

C. Decrease the intake of caffeine and spicy foods.

D. Eat three meals per day.

E. Sleep with the upper body elevated.

F. Maintain a normal body weight.

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

A hiatal hernia occurs when a portion of the stomach pushes through the diaphragm. A hiatal hernia may cause abdominal and sternal pain after eating. The discomfort is associated with reflux of gastric contents.

- **Option A:** To reduce gastric reflux, the nurse should instruct the client to avoid constrictive clothing. Instruct the client to avoid bending over, coughing, straining at defecations, and other activities that increase reflux.
- **Option B:** To reduce gastric reflux, the nurse should instruct the client to remain upright for 2 hours after eating. Instruct to remain in an upright position at least 2 hours after meals; avoiding eating 3 hours before bedtime. This helps control reflux and causes less irritation from reflux action into the esophagus.
- **Option C:** To reduce gastric reflux, the nurse should instruct the client to avoid caffeine and spicy foods. Avoid foods and liquids, such as coffee and alcohol, that stimulate the secretion of stomach acids. Instruct the client to avoid highly seasoned food, acidic juices, alcoholic drinks, bedtime snacks, and foods high in fat.
- **Option D:** To reduce gastric reflux, the nurse should instruct the client to eat small, frequent meals. Encourage small frequent meals of high calories and high protein foods. Small and frequent meals are easier to digest.
- **Option E:** To reduce gastric reflux, the nurse should instruct the client to sleep with the upper body elevated. Elevating the head of the bed six inches to prevent the reflux of stomach contents into the esophagus.

- **Option F:** To reduce gastric reflux, the nurse should instruct the client to lose weight, if obese. Accurately measure the client's weight and height for baseline data. Identify the amount of weight loss needed for optimal body size and frame. This provides a basis for dietary planning.

13. A client with rapid rate atrial fibrillation asks a nurse why the physician is going to perform carotid massage. The nurse responds that this procedure may stimulate the:

A. Vagus nerve to slow the heart rate.

B. Vagus nerve to increase the heart rate; overdriving the rhythm.

C. Diaphragmatic nerve to slow the heart rate.

D. Diaphragmatic nerve to overdrive the rhythm.

Correct Answer: A. Vagus nerve to slow the heart rate.

Carotid sinus massage is one of the maneuvers used for vagal stimulation to decrease a rapid heart rate and possibly terminate a tachydysrhythmias. The others include inducing the gag reflex and asking the client to strain or bear down. Medication therapy often is needed as an adjunct to keep the rate down or maintain the normal rhythm. Vagal maneuvers are techniques used to increase vagal parasympathetic tone in an attempt to diagnose and treat various arrhythmias. They are often utilized first in an effort to abort episodes of stable supraventricular tachycardia (SVT) or differentiate SVT from ventricular tachycardias (VT).

- **Option B:** Vagal maneuvers, including Carotid Sinus Massage and Valsalva Maneuver, transiently increase the arterial pressure in the carotid sinuses and aortic arch. This action triggers the baroreceptor reflex, which results in increased parasympathetic output to the heart via the vagus nerve (cranial nerve X).
- **Option C:** The location of the carotid sinus is at the bifurcation of the internal and external carotid artery from the common carotid artery. The sinus contains baroreceptors that sense changes in blood pressure. Afferent signals are then transmitted via the glossopharyngeal nerve (cranial nerve IX) to the nucleus tractus solitarius (NTS) within the medulla.
- **Option D:** Within the heart, the right vagus nerve serves to stimulate the sinoatrial (SA) node, the pacemaker of the healthy heart, in the right atrium; this causes slowed electrical activity within the SA node. The left vagus nerve mostly innervates atrioventricular (AV) node, which slows conduction between the atria and the ventricles. The end product of vagal stimulation is a decrease in the speed and frequency of electrical impulses in the heart, which could ultimately slow or terminate a tachydysrhythmia.

14. A 58-year-old librarian, an active walker, presents to the orthopedic unit for an arthroscopic surgery on her right knee due to osteoarthritis. Her medical history indicates a mild allergy to morphine, causing her to experience itching and hives. As she recovers from the procedure, the nurse evaluates postoperative interventions to optimize the patient's comfort and healing. Which postoperative nursing intervention should be implemented for this patient?

A. Applying ice packs to the surgical site to reduce swelling

B. Administering intravenous opioids for pain management

C. Encouraging immediate weight-bearing on the affected joint

D. Assisting with active range of motion exercises for the affected joint

Correct Answer: A. Applying ice packs to the surgical site to reduce swelling.

After arthroscopic surgery, it's common to experience swelling around the surgical site. Applying ice can help reduce inflammation and provide pain relief. Cold therapy is a common and beneficial intervention in the immediate post-operative phase. For the immediate postoperative period, given the patient's scenario and potential complications with some of the other interventions, applying ice packs can be the most effective and safest intervention to alleviate swelling and discomfort without introducing potential risks.

- **Option B:** While opioids can be effective for postoperative pain management, they should be used judiciously, especially in patients with known allergies or sensitivities. Given the patient's documented allergic reaction to morphine, an opioid, this might not be the safest choice unless alternative pain management strategies are considered.
- **Option C:** After arthroscopic surgery, weight-bearing recommendations vary based on the specific procedure and the surgeon's advice. Immediate weight-bearing may not always be recommended as it can put undue stress on the surgical site and impede healing.
- **Option D:** Active range of motion exercises might be beneficial postoperatively, but their initiation depends on the surgeon's guidelines. It's usually not the immediate first step post-operatively, as the joint needs some rest and recovery time before active movements are introduced.

15. What is the best source to use when conducting a level I systematic meta-analysis of the literature?

A. An electronic database

B. Doctoral dissertations

C. The Cochrane Statistical Methods

D. An electronic database and Doctoral dissertations

Correct Answer: C. The Cochrane Statistical Methods

Systematic reviews and meta-analyses are situated at the top of what is known as the "Evidence Pyramid". Systematic reviews and meta-analyses are considered to be the highest-quality evidence on a research topic because their study design reduces bias and produces more reliable findings. The Statistical Methods Group (SMG) (Cochrane Methods Statistics) is a forum where all statistical issues related to the work of Cochrane are discussed.

- **Option A:** A systematic review is a high-level overview of primary research on a particular research question that systematically identifies, selects, evaluates, and synthesizes all high-quality research evidence relevant to that question in order to answer it. In other words, it provides an exhaustive summary of the scholarly literature related to a particular research topic or question.
- **Option B:** A systematic review is often written by a panel of experts after reviewing all the information from both published and unpublished studies. The comprehensive nature of a systematic review distinguishes it from traditional literature reviews which typically examine a much smaller set of research evidence and present it from a single author's perspective.

- **Option D:** Not all systematic reviews include meta-analysis, but all meta-analyses are found in systematic reviews. Simply put, a systematic review refers to the entire process of selecting, evaluating, and synthesizing all available evidence, while the term meta-analysis refers to the statistical approach to combining the data derived from a systematic review.

16. A nurse is assessing an electrocardiogram rhythm strip. The P waves and QRS complexes are regular. The PR interval is 0.16 second, and QRS complexes measure 0.06 second. The overall heart rate is 64 beats per minute. The nurse assesses the cardiac rhythm as:

A. Normal sinus rhythm

B. Sinus bradycardia

C. Sick sinus syndrome

D. First-degree heart block

Correct Answer: A. Normal sinus rhythm

Measurements are normal, measuring 0.12 to 0.20 second and 0.4 to 0.10 second, respectively. Sinus rhythms originate in the SA node. The SA node is located in the right atrium and is the heart's natural pacemaker. The normal rate of the SA node is between 60 and 100. On ECG, sinus rhythm is represented by monomorphic P waves before each QRS complex and is regular.

- **Option B:** Sinus bradycardia is a cardiac rhythm with appropriate cardiac muscle depolarization initiating from the sinus node generating less than 60 beats per minute (bpm). The diagnosis of sinus bradycardia requires visualization of an electrocardiogram showing a normal sinus rhythm at a rate lower than 60 bpm.
- **Option C:** Sick sinus syndrome, also known as sinus node dysfunction (SND), is a disorder of the sinoatrial (SA) node caused by impaired pacemaker function and impulse transmission producing a constellation of abnormal rhythms. These include atrial bradyarrhythmias, atrial tachyarrhythmias and, sometimes, bradycardia alternates with tachycardia often referred to as "tachy-brady syndrome."
- **Option D:** First-degree atrioventricular (AV) block is a condition of abnormally slow conduction through the AV node. It is defined by ECG changes that include a PR interval of greater than 0.20 without disruption of atrial to ventricular conduction.

17. Which of the following is the correct practice of self-breast examination in a menopausal woman?

A. She should do it at the usual time that she experiences her menstrual period in the past to ensure that her hormones are not at its peak.

B. Any day of the month as long it is regularly observed on the same day every month.

C. Anytime she feels like doing it ideally every day.

D. Menopausal women do not need regular self-breast exams as long as they do it at least once every 6 months.

Correct Answer: B. Any day of the month as long it is regularly observed on the same day every month

Menopausal women still need to do self-examination of the breast regularly. Any day of the month is alright provided that she practices it monthly on the same day that she has chosen. The hormones estrogen and progesterone are already diminished during menopause so there is no need to consider the time to do it in relation to the menstrual cycle.

- **Option A:** After menopause, the breast undergoes involution, with the replacement of the pre-existing breast parenchyma with adipose and connective tissue.
- **Option C:** Because of the normal hormonal fluctuations in a woman's body that affect breast tissue, it is important to select the same time every month so you will be able to distinguish between a normal change and something that feels different.
- **Option D:** Choose a day of the month (e.g., the 1st or 15th of the month) and consistently perform the breast self-exam on that same day every month. Perform the exam again that same day but lying down – This way the woman will develop a feeling for her breasts in a different position, allowing for greater knowledge of the way her breasts feel. Forty percent of diagnosed breast cancers are detected by women who feel a lump, so establishing a regular breast self-exam is very important.

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

A. His symptoms are replaced by indifference to his feelings.

B. He participates in diversionary activities.

C. He learns to verbalize his feelings and concerns.

D. He states that his behavior is irrational.

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

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

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

19. A female client with hypothyroidism (myxedema) is receiving levothyroxine (Synthroid), 25 mcg P.O. daily. Which finding should nurse Hans recognize as an adverse drug effect?

A. Dysuria

B. Leg cramps

C. Tachycardia

D. Blurred vision

Correct Answer: C. Tachycardia

Levothyroxine, a synthetic thyroid hormone, is given to a client with hypothyroidism to simulate the effects of thyroxine. Adverse effects of this agent include tachycardia. Generally, adverse events resulting from incorrect dosing (excessive dosing) often form a hyperthyroid-like picture or due to an allergic reaction to the excipient of the levothyroxine tablets. The other options aren't associated with levothyroxine.

- **Option A:** Adverse effects (frequency undefined) include: angina pectoris, tachycardia, palpitations, arrhythmias, myocardial infarction, dyspnea, anxiety, fatigue, headache, heat intolerance, insomnia, irritability, diaphoresis, skin rash, alopecia, goiter, weight loss, menstrual irregularities, abdominal cramps, diarrhea, emesis, reduced fertility, and decreased bone mineral density (a result of TSH suppression).
- **Option B:** In the initial stage of overdose (6 to 12 hours post-ingestion), the common signs of toxicity would be tremulousness, tachycardia, hypertension, anxiety, and diarrhea. Rarely, convulsions, thyroid storm, acute psychosis, arrhythmias, and acute myocardial infarction may occur.
- **Option D:** In adults, monitor TSH levels approximately 6 to 8 weeks after initiating treatment with levothyroxine. Upon achieving the correct dosing of levothyroxine, monitor TSH levels 4 to 6 months after, and then every 12 months after that.

20. A male client had a nephrectomy 2 days ago and is now complaining of abdominal pressure and nausea. The first nursing action should be to:

A. Auscultate bowel sounds.

B. Palpate the abdomen.

C. Change the client's position.

D. Insert a rectal tube.

Correct Answer: A. Auscultate bowel sounds.

If abdominal distention is accompanied by nausea, the nurse must first auscultate bowel sounds. If bowel sounds are absent, the nurse should suspect gastric or small intestine dilation and these findings must be reported to the physician.

- **Option B:** Palpation is the examination of the abdomen for crepitus of the abdominal wall, for any abdominal tenderness, or for abdominal masses. It may be used to assess the client but this will not be the first choice following a nephrectomy.
- **Option C:** Changing positions would not diminish the client's nausea and abdominal pressure.
- **Option D:** If peristalsis is absent, inserting a rectal tube won't relieve the client's discomfort.

21. Which of the following drugs might be given to relieve pain from corneal abrasions?

A. Proparacaine hydrochloride (Alcaine)

B. Timolol maleate (Timoptic)

C. Betaxolol hydrochloride (Betoptic)

D. Levobunolol hydrochloride (Betagan)

Correct Answer: A. Proparacaine hydrochloride (Alcaine)

This is the only drug listed that is an anesthetic eye preparation. ALCAINE (proparacaine hydrochloride ophthalmic solution) (Proparacaine Hydrochloride) Ophthalmic Solution is indicated for topical anesthesia in ophthalmic practice. Representative ophthalmic procedures in which the preparation provides good local anesthesia include measurement of intraocular pressure (tonometry), removal of foreign bodies and sutures from the cornea, conjunctival scraping in diagnosis and gonioscopic examination; it is also indicated for use as a topical anesthetic prior to surgical operations such as cataract extraction.

- **Option B**: Ophthalmic timolol is used to treat glaucoma, a condition in which increased pressure in the eye can lead to the gradual loss of vision. Timolol is in a class of medications called beta-blockers. It works by decreasing the pressure in the eye. Timolol eye drops and gel-forming solution control glaucoma but do not cure it. Continue to use timolol even if you feel well. Do not stop using the medication without talking to a doctor.
- **Option C:** Ophthalmic betaxolol is used to treat glaucoma, a condition in which increased pressure in the eye can lead to the gradual loss of vision. Betaxolol is in a class of medications called beta-blockers. It works by decreasing the pressure in the eye.
- **Option D:** Ophthalmic levobunolol is used to treat glaucoma, a condition in which increased pressure in the eye can lead to a gradual loss of vision. Levobunolol is in a class of medications called beta-blockers. It works by decreasing the pressure in the eye.

22. A child is seen in the emergency department for scarlet fever. Which of the following descriptions of scarlet fever is not correct?

A. Scarlet fever is caused by infection with group A Streptococcus bacteria.

B. "Strawberry tongue" is a characteristic sign.

C. Petechiae occur on the soft palate.

D. The pharynx is red and swollen.

Correct Answer: C. Petechiae occur on the soft palate.

Petechiae on the soft palate are characteristic of rubella infection. Postnatal infection with rubella can be asymptomatic in approximately 25% to 50% of the patients, especially in young children. The incubation period ranges from 14 to 21 days and is followed by a prodromal illness characterized by low-grade fever, malaise, anorexia, headaches, sore throat, and adenopathy.

- **Option A:** It is caused by streptococcal pyrogenic exotoxins (SPEs) types A, B, and C produced by group A beta-hemolytic streptococci (GABHS) found in secretions and discharge from the nose, ears, throat, and skin. The causative bacteria is Streptococcus pyogenes, which generates an endotoxin mainly responsible for the skin manifestation of the infection. This is further classified as group A and referred to as Group A Strep (GAS).
- **Option B:** On day 1 or 2, the tongue is heavily coated with a white membrane through which edematous red papillae protrude (classic appearance of white strawberry tongue). By day 4 or 5,

the white membrane sloughs off, revealing a shiny red tongue with prominent papillae (red strawberry tongue).

- **Option D:** Red, edematous, exudative tonsils are typically observed if the infection originates in this area. Typically, scarlet fever is associated with acute pharyngitis. As a result, fever, sore throat, pain with swallowing, and cervical adenopathy is present.

23. A client tells the nurse that the television newscaster is sending a secret message to her. The nurse suspects the client is experiencing:

A. A delusion

B. Flight of ideas

C. Ideas of reference

D. Hallucination

Correct Answer: C. Ideas of reference

Ideas of reference refers to the mistaken belief that neutral stimuli have special meaning to the individual such as the television newscaster sending a message directly to the individual. In people with bipolar disorder, mania and hypomania can comprise various symptoms, from reckless spending to sexual promiscuity. In addition, some more subtle symptoms may also occur, such as the belief held by some patients that everything occurring around them is related somehow to them when in fact it isn't. This symptom is known as ideas of reference.

- **Option A:** A delusion is a false belief. Delusions are defined as fixed, false beliefs that conflict with reality. Despite contrary evidence, a person in a delusional state can't let go of their convictions. Delusions are often reinforced by the misinterpretation of events. Many delusions also involve some level of paranoia. For example, someone might contend that the government is controlling our every move via radio waves despite evidence to the contrary.
- **Option B:** Flight of ideas is a speech pattern in which the client skips from one unrelated subject to another. A nearly continuous flow of accelerated speech with abrupt changes from topic to topic that are usually based on understandable associations, distracting stimuli, or plays on words. When severe, speech may be disorganized and incoherent. It is part of the DSM -5 criteria for Manic episodes.
- **Option D:** A hallucination is a sensory perception, such as hearing voices and seeing objects, that only the client experiences. Hallucinations involve sensing things such as visions, sounds, or smells that seem real but are not. These things are created by the mind. Common hallucinations can include feeling sensations in the body, such as a crawling feeling on the skin or the movement of internal organs; hearing sounds, such as music, footsteps, windows or doors banging; hearing voices when no one has spoken (the most common type of hallucination). These voices may be positive, negative, or neutral. They may command someone to do something that may cause harm to themselves or others.

24. The nurse is caring for a client with systemic lupus erythematosus (SLE). The major complication associated with systemic lupus erythematosus is:

A. Meningitis

B. Nephritis

C. Cardiomegaly

D. Desquamation

Correct Answer: B. Nephritis

- Option B: Systemic lupus erythematosus is a form of lupus and an autoimmune disease in which the antibodies attack the body's own cells and tissue causing inflammation and damage to organs such as the kidneys resulting in complications such as nephritis.
- Options A and C: SLE affects the musculoskeletal, integumentary, renal, nervous, and cardiovascular systems, but the major complication is renal involvement.
- Option D: SLE produces a "butterfly" rash, not desquamation.

25. A nurse is monitoring a client who is taking digoxin (Lanoxin). All of which are the side effects associated with the medication, except?

A. Anorexia

B. Blurred vision

C. Diarrhea

D. Tremors

Correct Answer: D. Tremors

Signs of digoxin toxicity are as follows, anorexia, nausea, vomiting, diarrhea, and blurred vision.

26. Angela has a history of conflict-filled relationships. Despite an expressed desire for friends, she acts in ways that tend to alienate people. Which nursing intervention would be important for Angela?

A. Establish a therapeutic relationship in which the nurse uses role-modeling and role-playing for appropriate behaviors.

B. Help the client to select friends who are kind and extra caring.

C. Point out that the client acts in ways that alienate others.

D. Recognize that this client is unlikely to change and therefore intervention is inappropriate.

Correct Answer: A. Establish a therapeutic relationship in which the nurse uses role-modeling and role-playing for appropriate behaviors.

A therapeutic relationship shows acceptance, and using role modeling and role-playing can help the client to learn appropriate behaviors. Problem solve and role play with client acceptable social skills that will help obtain needs effectively and appropriately.

- **Option B:** This is an inappropriate and unrealistic solution to the client's problem behaviors. Over time, alternative ways of experiencing interpersonal relationships might emerge. Take one small skill that the client is willing to work on, break it down into small parts, and work on it with the client.
- **Option C:** This is also inappropriate because the client is not likely to accept direct criticism of her behavior; such individuals do not perceive a problem with their own behavior. Expand limits by clarifying expectations for clients in a number of settings. When time is taken in initial meetings to clarify expectations, confrontations, and power struggles with clients can be minimized and even

avoided.

- **Option D:** Ignores the client's potential for growth and improvement. Collaborate with the client, as well as the multidisciplinary team, to establish a reward system for compliance with clearly defined expectations. Tangible reinforcement for meeting expectations can strengthen the client's positive behaviors.

27. A nurse is caring for a patient with a platelet count of 20,000/microliter. Which of the following is an important intervention?

A. Observe for evidence of spontaneous bleeding.

B. Limit visitors to family only.

C. Give aspirin in case of headaches.

D. Impose immune precautions.

Correct Answer: A. Observe for evidence of spontaneous bleeding.

Platelet counts under 30,000/microliter may cause spontaneous petechiae and bruising, particularly in the extremities. When the count falls below 15,000, spontaneous bleeding into the brain and internal organs may occur. The blood clotting cascade is an integral system requiring intrinsic and extrinsic factors. Derangements in any factors can affect clotting ability. These laboratory tests provide important information about the patient's coagulation status and bleeding potential. The specific laboratory values to be monitored will depend on the patient's specific clinical condition.

- **Option B:** There is no reason to limit visitors as long as any physical trauma is prevented. Educate the patient and family members about signs of bleeding that need to be reported to a health care provider. Early evaluation and treatment of bleeding by a health care provider reduce the risk for complications from blood loss.
- **Option C:** Headaches may be a sign and should be watched for. Aspirin disables platelets and should never be used in the presence of thrombocytopenia. Educate the patient about over-the-counter drugs and avoid products that contain aspirin or NSAIDs such as ibuprofen and naproxen. These drugs not only decrease normal platelet aggregation but also decrease the integrity of gastric mucosa through inhibition of cyclooxygenase (COX)-1 inhibitor and therefore increase the risk for gastrointestinal bleeding.
- **Option D:** Thrombocytopenia does not compromise immunity. Educate the at-risk patient about precautionary measures to prevent tissue trauma or disruption of the normal clotting mechanisms. Information about precautionary measures lessens the risk for bleeding. Use a soft-bristled toothbrush and nonabrasive toothpaste. Avoid the use of toothpicks and dental floss.

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

A. Keeping the client on a stretcher.

B. Logrolling the client on a firm mattress.

C. Logrolling the client on a soft mattress.

D. Placing the client on a Stryker frame.

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

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

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

29. Mrs. Anderson, a 32-year-old woman in her second trimester of pregnancy, visits the rheumatology clinic for a scheduled follow-up. She has a documented history of rheumatoid arthritis (RA) and has been managing her condition with medications. During her consultation, Mrs. Anderson expresses her desire to breastfeed her baby once born. She expresses concerns about the effects of her RA medications on the baby during breastfeeding and seeks advice. Recognizing the need for proper patient education, which of the following pieces of information should the nurse provide to Mrs. Anderson? Select all that apply.

A. Rheumatoid arthritis symptoms may improve during pregnancy.

B. Breastfeeding is generally safe while taking certain rheumatoid arthritis medications.

C. Rheumatoid arthritis medications should be discontinued during pregnancy and breastfeeding.

D. Consultation with a lactation specialist is unnecessary.

E. Avoidance of all physical activity during pregnancy and breastfeeding.

Correct Answer: A and B.

- **Option A:** It is essential for the nurse to communicate that some women with rheumatoid arthritis experience a temporary improvement in their symptoms during pregnancy. This phenomenon, often referred to as "pregnancy-induced remission," may bring relief to the patient and is a positive aspect of managing rheumatoid arthritis while expecting.
- **Option B:** The nurse should inform Mrs. Anderson that, in consultation with her healthcare provider, it is possible to safely breastfeed while taking certain rheumatoid arthritis medications. There are medications considered compatible with breastfeeding, and the decision should be made in collaboration with the healthcare team to ensure the well-being of both mother and baby.

- **Option C:** This statement is not accurate and could be detrimental to Mrs. Anderson's health. The management of rheumatoid arthritis during pregnancy and breastfeeding should be carefully considered with the guidance of a healthcare provider. Some medications may need to be adjusted or changed, but discontinuing them entirely can lead to uncontrolled disease activity, which is not advisable.
- **Option D:** Consulting with a lactation specialist can be highly beneficial for pregnant patients with rheumatoid arthritis who plan to breastfeed. These specialists can provide valuable guidance on breastfeeding techniques, positioning, and addressing any specific concerns related to breastfeeding while managing rheumatoid arthritis.
- **Option E:** This statement is not accurate and could be detrimental to the patient's overall health. While some modifications and precautions may be necessary during pregnancy and breastfeeding, avoiding all physical activity is not recommended. Gentle and appropriate physical activity can have numerous benefits for both the mother and the baby during these phases.

30. The following are teaching guidelines regarding radiation therapy except:

A. The therapy is painless

B. To promote safety, the client is assisted by therapy personnel while the machine is in operation

C. The client may communicate all his concerns or needs or discomforts while the machine is operating

D. Safety precautions are necessary only during the time of actual irradiation

Correct Answer: B. To promote safety, the client is assisted by therapy personnel while the machine is in operation

- **Option B:** To promote safety to the personnel, the client will remain alone in the treatment room while the machine is in operation.
- **Options A and D:** There is no residual radioactivity after radiation therapy. Safety precautions are necessary only during the time of actual irradiation. The client may resume normal activities of daily living afterward.
- **Option C**: The client may voice out any concern throughout the treatment because a technologist is just outside the room observing through a window or closed-circuit TV.

31. Nurse Kenzo is teaching a client about sertraline (Zoloft), which has been prescribed for depression. A significant side effect is an interference with sexual arousal by inhibiting erectile function. How should Nurse Kenzo approach this topic?

A. Nurse Kenzo should avoid mentioning the sexual side effects to prevent the client from having anxiety about potential erectile problems.

B. Nurse Kenzo should advise the client to report any changes in sexual functioning in case medication adjustments are needed.

C. Nurse Kenzo should explain that the client's sexual desire will probably decrease while on this medication.

D. Nurse Kenzo should tell the client that sexual side effects are expected, but that they will decrease when his depression lifts.

Correct Answer: B. Nurse Kenzo should advise the client to report any changes in sexual functioning in case medication adjustments are needed.

Clients commonly discontinue medications to avoid or correct sexual side effects, but they are less likely to do that when health professionals offer assistance with sexual issues. Generally, clients avoid discussing sexual issues unless health professionals give permission by raising the issue first. Sexual dysfunction is a common side effect of antidepressants and can have a significant impact on the person's quality of life, relationships, mental health, and recovery. The reported incidence of sexual dysfunction associated with antidepressant medication varies considerably between studies, making it difficult to estimate the exact incidence or prevalence.

- **Option A:** Overall, 73% of the SSRI-treated clients reported adverse sexual side effects; in contrast, to 14% of clients treated with bupropion. The three SSRIs, to an equal degree, significantly decreased libido, arousal, duration of orgasm, and intensity of orgasm below levels experienced pre-morbidly. In comparison, bupropion-treated clients reported significant increases in libido, level of arousal, intensity of orgasm, and duration of orgasm beyond levels experienced premorbidly.
- **Option C:** The sexual problems reported range from decreased sexual desire, decreased sexual excitement, diminished or delayed orgasm, to erection or delayed ejaculation problems. There are a number of case reports of sexual side effects, such as priapism, painful ejaculation, penile anesthesia, loss of sensation in the vagina and nipples, persistent genital arousal, and nonpuerperal lactation in women.
- **Option D:** Because most antidepressants modulate serotonin concentration, it is generally thought that elevated serotonin levels diminish sexual function. Serotonergic nerve terminals target dopamine and norepinephrine pathways in the brain and inhibit their activity, both of these neurotransmitters having a role in the desire and arousal phases of the sexual response cycle. 80% of serotonin is localized in the periphery, where when elevated, it directly reduces sensation in the anatomical structures of the reproductive system as well as diminishing erection, vaginal lubrication, ejaculation, and orgasm.

32. The nurse would teach patients that antacids are effective in the treatment of hyperacidity because they:

A. Neutralize gastric acid.

B. Decrease stomach motility.

C. Decrease gastric pH.

D. Decrease duodenal pH.

Correct Answer: A. Neutralize gastric acid

Antacids work by neutralizing gastric acid, which would cause an increase in pH. Currently, antacid use is restricted to the relief of mild intermittent gastroesophageal reflux disease (GERD) associated with heartburn. The estimated prevalence of heartburn at least once per week in North America ranges from 18% to 28%, with 25% of adults reporting heartburn daily.

- **Option B:** Antacids do not affect gastric motility. Antacids are a combination of various compounds with various salts of calcium, magnesium, and aluminum as active ingredients. The antacids act by neutralizing the acid in the stomach and by inhibiting pepsin, which is a proteolytic enzyme. Each of these cationic salts has a characteristic pharmacological property that determines its clinical use.
- **Option C:** The formulation of aluminum hydrochloride and water results in the neutralization of the acid in the stomach. It is also known to inhibit pepsin activity. Aluminum hydroxide is complexed

with a sulfated polysaccharide sucrose octasulfate to form sucralfate. This complex does not have a significant buffering action against the acid or has no effect on the pepsin secretion and does not alter the gastric acid production in any way.

- **Option D:** Calcium salts neutralize gastric acidity resulting in increased gastric and duodenal bulb pH; they additionally inhibit the proteolytic activity of pepsin if the pH is greater than 4 and increase lower esophageal sphincter tone. The calcium released from calcium carbonate is known to increase peristalsis in the esophagus, pushing the acid into the stomach and providing relief from symptoms of heartburn.

33. The nurse should observe for side effects associated with the use of bronchodilators. A common side effect of bronchodilators is:

A. Decreased urine output

B. Tremors

C. Vision changes

D. Hypotension

Correct Answer: B. Tremors

- Option B: Bronchodilators are medications that relax the muscles surrounding the airway. Common side effects of bronchodilators include nausea, dry mouth, increased heart rate, and tremors.
- Options A, C, and D: Decreased urine output, vision changes, and hypotension are signs of bronchodilator overdose.

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

A. A 34-year-old patient newly diagnosed with multiple sclerosis (MS).

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

C. A 56-year-old patient with Guillain-Barre syndrome (GBS) in respiratory distress.

D. A 25-year-old patient admitted with CA level spinal cord injury (SCI).

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

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

- **Option A:** The newly diagnosed patient will need to be transferred to the ICU. Multiple sclerosis (MS) is an immune-mediated inflammatory disease that attacks myelinated axons in the central nervous system, destroying the myelin and the axon in variable degrees and producing significant physical disability within 20–25 years in more than 30% of patients. The hallmark of MS is symptomatic episodes that occur months or years apart and affect different anatomic locations.
- **Option C:** The patient with GBS is in respiratory distress and should be assigned to an experienced neurological nurse. Guillain-Barré syndrome (GBS) is a rare disorder in which a person’s own immune system damages their nerve cells, causing muscle weakness and sometimes paralysis. GBS can cause symptoms that usually last for a few weeks.

- **Option D:** The patient with C4 SCI is at risk for respiratory arrest. A C4 spinal cord injury occurs when damage is dealt about mid-way down the cervical spinal cord — the topmost portion of the spinal cord that is located in the neck and upper shoulders.

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

A. Wear comfortable clothing and shoes for the procedure

B. Maintain an NPO status before the procedure

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

D. Eat a light breakfast only

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

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

36. Which of the following nursing interventions are written correctly?

A. Apply continuous passive motion machines during the day.

B. Perform neurovascular checks.

C. Elevate head of bed 30 degrees before meals.

D. Change dressing once a shift.

Correct Answer: C. Elevate head of bed 30 degrees before meals.

It is specific in what to do and when. Nursing interventions should be specific and clearly stated, beginning with an action verb indicating what the nurse is expected to do. Action verb starts the intervention and must be precise.

- **Option A:** This intervention does not specify the location of the application. Nursing interventions are the actual treatments and actions that are performed to help the patient to reach the goals that are set for them. The nurse uses his or her knowledge, experience, and critical-thinking skills to decide which interventions will help the patient the most.
- **Option B:** It was not stated in this intervention when the neurovascular check should be performed. Nurses must use their knowledge, experience, resources, research of evidence-based practice, the counsel of others, and critical-thinking skills to decide which nursing interventions would best benefit a specific patient.
- **Option D:** Qualifiers of how, when, where, time, frequency, and amount provide the content of the planned activity. For example: “Educate parents on how to take temperature and notify of any changes,” or “Assess urine for color, amount, odor, and turbidity.”

37. A nurse is caring for a patient with a platelet count of 20,000/microliter. Which of the following is an important intervention?

A. Observe for evidence of spontaneous bleeding.

B. Limit visitors to family only.

C. Give aspirin in case of headaches.

D. Impose immune precautions.

Correct Answer: A. Observe for evidence of spontaneous bleeding.

Platelet counts under 30,000/microliter may cause spontaneous petechiae and bruising, particularly in the extremities. When the count falls below 15,000, spontaneous bleeding into the brain and internal organs may occur. Headaches may be a sign and should be watched for.

- **Options B and D:** Thrombocytopenia does not compromise immunity, and there is no reason to limit visitors as long as any physical trauma is prevented.
- **Option C:** Aspirin disables platelets and should never be used in the presence of thrombocytopenia.

38. A client needs rapid cleansing of the bowel, which category is best used?

A. Bacid

B. Bulk-forming agent

C. Intestinal flora modifiers

D. Saline laxatives with magnesium

Correct Answer: D. Saline laxatives with magnesium

Saline laxatives are the best agents for rapid bowel cleansing. Magnesium citrate is a saline laxative that is thought to work by increasing fluid in the small intestine. It usually results in a bowel movement within 30 minutes to 3 hours.

- **Option A:** Bacid is an intestinal flora modifier. This product can help restore the normal balance of intestinal bacteria. This product has been used for diarrhea and other stomach/intestinal problems. It has also been used for vaginal and urinary tract infections. Some diet supplement products have been found to contain possibly harmful impurities/additives.
- **Option B:** Bulk-forming agents will not produce rapid cleansing. Bulk-forming laxatives absorb liquid in the intestines. This creates a bulky, more liquid-like stool that's softer and easier to pass. Common bulk-forming laxatives include psyllium (Metamucil), polycarbophil (FiberCon), and methylcellulose (Citrucel). Bulk-forming laxatives are different from these laxatives. They're most similar to stool softeners in that they help the bowels retain water. Unlike stimulant laxatives, they don't stimulate nerves that speed up the movement of bowels through the intestines. They also don't lubricate the stools like lubricant laxatives do. Osmotic laxatives differ from bulk-forming types by helping the intestines — not the bowels — retain water.
- **Option C:** Intestinal flora modifiers will not not produce rapid cleansing as well. Probiotics are usually defined as products which contain viable non-pathogenic microorganisms able to confer health benefits to the host. There are specific gastrointestinal effects of probiotics such as alleviating inflammatory bowel disease, reducing acute diarrhoea in children, inhibiting Salmonella and Helicobacter pylori, removing cholesterol, secreting enzymes and bacteriocins and

immunomodulation.

39. A 3-year-old child is receiving dextrose 5% in water and half-normal saline solution at 100 ml/hour. Which sign or symptom suggests excessive I.V. fluid intake?

A. Temperature of 102°F (38.9°C)

B. Worsening dyspnea

C. Gastric distension

D. Nausea and vomiting

Correct Answer: B. Worsening dyspnea

Dyspnea and other signs of respiratory distress signify fluid volume excess (overload), which can occur quickly in a child as fluid shifts rapidly between the intracellular and extracellular compartments. The excess fluid circulating around the body can cause waterlogging of the lungs, leading to breathlessness. If fluid overload goes on for a long term it eventually leads to heart failure.

- **Option A:** An elevated temperature may indicate a fluid volume deficit. Hypohydration increases heat storage by reducing sweating rate and skin blood flow responses for a given core temperature. Hypertonicity and hypovolemia both contribute to reduced heat loss and increased heat storage.
- **Option C:** Gastric distention may suggest excessive oral fluid intake or infection. Abdominal distension occurs when substances, such as air (gas) or fluid, accumulate in the abdomen causing its outward expansion beyond the normal girth of the stomach and waist. It is typically a symptom of an underlying disease or dysfunction in the body, rather than an illness in its own right.
- **Option D:** Conditions that cause blood or body fluid loss can cause hypovolemia, as can inadequate fluid intake. If persistent or severe, diarrhea and vomiting can deplete body fluids. All living organisms must maintain an adequate fluid balance to preserve homeostasis. Water constitutes the most abundant fluid in the body, at around 50% to 60% of the body weight.

40. A client with acute leukemia is admitted to the oncology unit. Which of the following would be most important for the nurse to inquire?

A. "Have you noticed a change in sleeping habits recently?"

B. "Have you had a respiratory infection in the last 6 months?"

C. "Have you lost weight recently?"

D. "Have you noticed changes in your alertness?"

Correct Answer: B. “Have you had a respiratory infection in the last 6 months?”

The client with leukemia is at risk for infection and has often had recurrent respiratory infections during the previous 6 months.

- **Options A, C, and D:** Insomnolence, weight loss, and a decrease in alertness also occur in leukemia, but bleeding tendencies and infections are the primary clinical manifestations.

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

A. Teaching the patient about the importance of adequate fluid intake and hydration.

B. Assisting the patient to a sitting position with neck flexed, shoulders relaxed, and knees flexed.

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

D. Encouraging the patient to take a deep breath, hold it for 2 seconds, then cough two or three times in succession.

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

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

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

42. In reducing the risk of endocarditis, good dental care is an important measure. To promote good dental care in clients with endocarditis in a teaching plan should include proper use of?

A. Dental floss

B. Electric toothbrush

C. Manual toothbrush

D. Irrigation device

Correct Answer: C. Manual toothbrush

The use of an electric toothbrush, irrigation device or dental floss may cause bleeding of gums, allowing bacteria to enter and increasing the risk of endocarditis. Maintaining good oral hygiene and infection

control can decrease the incidence of endocarditis in the moderate-risk group of patients and can eliminate the necessity of antibiotic prophylaxis of endocarditis.

- **Option A:** Dental floss may injure the gums and cause bleeding that may lead to infection. The gums become inflamed (red and swollen) and often bleed during tooth brushing, flossing, or certain dental procedures involving manipulation of the gums. When gums bleed, the bacteria can enter the bloodstream and can infect other parts of the body.
- **Option B:** Electronic toothbrushes cause too much friction to the gums and cause an infection that can increase the risk of endocarditis. In very rare cases, bacteria in the mouth may trigger endocarditis in people at higher risk. Here's what happens: Bacteria found in tooth plaque may multiply and cause gingivitis (gum disease).
- **Option D:** An irrigation device uses a stream of pressurized, pulsating water to clean between teeth and below the gum line. The water's pressure may cause injury to sensitive gums and lead to bleeding or an infection. To prevent endocarditis, patients with certain heart conditions receive a single dose of an antibiotic. The patient receives it about one hour prior to certain dental treatments.

43. The nurse is monitoring a 78-year-old male patient who has experienced a significant cerebrovascular accident resulting in extensive brain damage. During a comprehensive evaluation, the nurse observes the patient's respiratory pattern and identifies a cycle of respirations that increase and decrease in depth and rate, culminating in periods where breathing temporarily ceases. This observation is most consistent with which of the following descriptions?

A. Progressively deeper breaths followed by shallower breaths with apneic periods.

B. Rapid, deep breathing with abrupt pauses between each breath.

C. Rapid, deep breathing and irregular breathing without pauses.

D. Shallow breathing with an increased respiratory rate.

Correct Answer: A: Progressively deeper breaths followed by shallower breaths with apneic periods.

The pattern described is indicative of Cheyne-Stokes respirations, which are often seen in patients with conditions that affect the brain's respiratory centers, such as following a severe stroke.

- **Option B:** Biot's respirations are rapid, deep breathing with abrupt pauses between each breath and equal depth between each breath.
- **Option C:** Kussmaul's respirations are rapid, deep breathing without pauses.
- **Option D:** Tachypnea is shallow breathing with increased respiratory rate.

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

A. Depression

B. Denial

C. Anger

D. Bargaining

Correct Answer: C. Anger

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

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

45. Patients with esophageal varices would reveal the following assessment:

A. Increased blood pressure

B. Increased heart rate

C. Decreased respiratory rate

D. Increased urinary output

Correct Answer: B. Increased heart rate

Tachycardia is an early sign of compensation for patients with esophageal varices. Since the portal venous system has no valves, resistance at any level between the splanchnic vessels and the right side of the heart results in retrograde flow and elevated pressure. The collaterals slowly enlarge and connect the systemic circulation to the portal venous system.

- **Option A:** Esophageal varices are a direct result of high blood pressure in the portal vein. This condition is called portal hypertension. It causes blood to build up in nearby blood vessels, including those in your esophagus. Veins begin to dilate and swell as a result of increased blood flow.
- **Option C:** The respiratory rate is not decreased in esophageal varices. Esophageal varices are the major complication of portal hypertension. It is detected in about 50% of cirrhosis patients, and approximately 5–15% of cirrhosis patients show newly formed varices or worsening of varices each year.
- **Option D:** Effective resuscitation, accurate diagnosis, and early treatment are key to reducing mortality in variceal bleeding. The aims are not only to stop bleeding as soon as possible but also to prevent early re-bleeding. Early rebleeding, as with peptic ulcer disease, is significantly

associated with worsening mortality.

46. After taking glipizide (Glucotrol) for 9 months, a male client experiences secondary failure. Which of the following would the nurse expect the physician to do?

A. Initiate insulin therapy.

B. Switch the client to a different oral antidiabetic agent.

C. Prescribe an additional oral antidiabetic agent.

D. Restrict carbohydrate intake to less than 30% of the total caloric intake.

Correct Answer: B. Switch the client to a different oral antidiabetic agent.

Many clients (25% to 60%) with secondary failure respond to a different oral antidiabetic agent. Therefore, it wouldn't be appropriate to initiate insulin therapy at this time. However, if a new oral antidiabetic agent is unsuccessful in keeping glucose levels at an acceptable level, insulin may be used in addition to the antidiabetic agent.

- **Option A:** Glipizide can be used concomitantly with insulin, but the dose of glipizide will typically need to be at the lower end of the dose range to prevent hypoglycemia. If discontinuation of insulin becomes necessary, then the patient's urine and blood sugars should be monitored at least three times a day.
- **Option C:** Second-generation sulfonylureas are considered to be more potent by weight when compared to the first-generation agents. Sulfonylureas were discovered in 1942 and have enjoyed extensive use in type 2 diabetes mellitus treatment since the 1960s.
- **Option D:** Other drug classes used in the treatment of diabetes mellitus type 2 include alpha-glucosidase inhibitors, biguanides, dipeptidyl peptidase-4 (DPP-4) inhibitors, glucagon-like peptide-1 (GLP-1) receptor agonists, glinides, and thiazolidinediones.

47. A nurse in a post-surgical unit is monitoring a 46-year-old patient who underwent a thyroidectomy 12 hours ago for the treatment of Grave's disease. Which of the following observations should most concern the nurse?

A. Blood pressure 138/82 mmHg, respirations 16 per minute, oral temperature 37.2ºC or 99º F.

B. The patient carefully supports their head and neck when turning their head to the right.

C. The patient expresses difficulty in swallowing but can manage liquids.

D. The patient appears drowsy and complains of a sore throat.

E. The patient shows involuntary flexion of their wrist when blood pressure is measured.

F. The patient has a hoarse voice when speaking.

Correct Answer: E. The patient shows involuntary flexion of their wrist when blood pressure is measured.

Carpal spasms (Trousseau's sign) indicate hypocalcemia which can occur after thyroidectomy due to accidental removal or damage to the parathyroid glands. Hypocalcemia is a serious complication and requires immediate attention. The other options, while they might warrant monitoring, are not as immediately concerning as a potential sign of hypocalcemia.

- **Option A:** The vital signs are all within the normal range.
- **Option B:** Supporting the head and neck while turning protects the surgical site from dehiscence.
- **Option C:** Common side effect of neck surgery.
- **Option D:** Drowsiness may be a side effect of the anesthesia used during surgery and will fade away eventually; a sore throat is a normal finding after thyroid surgery.
- **Option F:** Hoarseness of voice is a common side effect of post-op thyroidectomy due to one or more of the nerves irritated during the procedure of due to inflammation that occurs after surgery.

48. Which of the following positions would best aid breathing for a patient with acute pulmonary edema?

A. Lying flat in bed

B. Left side-lying position

C. High Fowler's position

D. Semi-Fowler's position

Correct Answer: C. High Fowler's position

High Fowler's position facilitates breathing by reducing venous return. Lying flat and side-lying positions worsen breathing and increase the heart's workload.

- **Option A:** Lying flat in bed would make the patient feel like he is "drowning".
- **Option C:** Side-lying position worsens breathing and increases the heart's workload.
- **Option D:** Semi-Fowler's may not be enough to improve the patient's breathing.

49. A nurse is preparing a plan of care for a client with diabetes mellitus who has hyperglycemia. The priority nursing diagnosis would be:

A. High risk for deficient fluid volume

B. Deficient knowledge: disease process and treatment

C. Imbalanced nutrition: less than body requirements

D. Disabled family coping: compromised

Correct Answer: A. High risk for deficient fluid volume

Increased blood glucose will cause the kidneys to excrete the glucose on the urine. This glucose is accompanied by fluids and electrolytes, causing osmotic diuresis leading to dehydration. This fluid loss must be replaced when it becomes severe.

- **Option B:** The focus of diabetes education should be patient empowerment to address changes in health behavior and self-care. Providing complete information and proper education to patients with diabetes can dramatically increase adherence to the treatment regimen.
- **Option C:** Nutrition plays an important role in the management and treatment of diabetes. Diabetes requires a balance between the intake of nutrients, expenditure of energy, and timing and dose of insulin or oral antidiabetic agents.

- **Option D:** Compromised family coping may be related to inadequate or incorrect information or understanding by primary persons, other situation crises or situations the SO's may be facing, lifelong conditions requiring behavioral changes impacting the family.

50. A client has a positive reaction to the PPD test. The nurse correctly interprets this reaction to mean that the client has:

A. Active TB

B. Had contact with Mycobacterium tuberculosis.

C. Developed a resistance to tubercle bacilli.

D. Developed passive immunity to TB.

Correct Answer: B. Had contact with Mycobacterium tuberculosis.

A positive PPD test indicates that the client has been exposed to tubercle bacilli. Exposure does not necessarily mean that active disease exists. If the infection risk is very high, the PPD test need not be repeated. The positive PPD test is usually followed by TB symptom assessment, physical exam, and chest radiograph. If there are no TB symptoms and no evidence of active tuberculosis infection on physical exam and chest radiograph, the patient most likely has latent TB. The treatment of latent TB should be encouraged once detected.

- **Option A:** A person with active infection usually presents with symptoms of the part affected and constitutional symptoms such as unexplained weight loss, fever, fatigue, loss of appetite, and night sweats. The latent TB, however, is asymptomatic and non-infectious. Early diagnosis of active TB is crucial to managing the disease in time and preventing its spread. The latent TB infection is non-infectious and asymptomatic, with a significant worldwide prevalence (33%).
- **Option C:** The benefit to the PPD test is the rapid identification of the presence of TB infection and, thus, the rapid diagnosis of TB. Although sometimes the infection may not be active, the detection of latent TB allows for treatment and decreases the risk of progression to active TB. It is a very simple and inexpensive skin test (not routinely recommended).
- **Option D:** Some individual's ability to react to tuberculin antigen wanes over time, which results in a false-negative reaction. In individuals with very old tuberculosis infection (many years), sensitization to tuberculin is weak, and the PPD test may be a false negative. However, if a subsequent test is administered, the tuberculin PPD may stimulate the immune system.

51. You are the charge nurse on the pediatric unit when a pediatrician calls wanting to admit a child with rubeola (measles). Which of these factors is of most concern in determining whether to admit the child to your unit?

A. No negative-airflow rooms are available on the unit

B. The infection control nurse liaison is not on the unit today

C. There are several children receiving chemotherapy on the unit

D. The unit is not staffed with the usual number of RNs

Correct Answer: A. No negative-airflow rooms are available on the unit

Because clients with rubeola require the implementation of airborne precautions, which include placement in a negative airflow room, this child cannot be admitted to the pediatric unit. An airborne

isolation room is also known as a negative pressure room. This negative pressure room is usually a single-occupancy patient-care room frequently used to isolated individuals with confirmed or suspected airborne infections. The other circumstances may require actions such as staff reassignments but would not prevent the admission of a client with rubeola.

- **Option B:** The absence of the infection control nurse liaison should not prevent the admission of the child with rubeola. Before transferring a patient with an airborne infection, one must always communicate with the relevant department first. The earlier the airborne prevention methods are adopted, the lower the risk of transmission to other patients and healthcare staff.
- **Option C:** The clients receiving therapy can be transferred to a different location far from the isolation room. The door to the room of the isolation area must be kept closed to maintain negative pressure even if the client is not in the room. The windows in the room should remain closed at all times; opening the window may cause the reversal of airflow, which counters the benefits of a negative pressure room.
- **Option D:** Only healthcare providers immunized to the organism in question should enter a room where airborne precautions are in place for varicella or measles. A respirator is not necessary for immunized individuals but is required for non-immunized workers who provide care.

52. The mechanism of action of diphenoxylate (Lotomil) is:

A. An increase in intestinal excretion of water.

B. An increase in intestinal motility.

C. A decrease in peristalsis in the intestinal wall.

D. A decrease in the reabsorption of water in the bowel.

Correct Answer: C. A decrease in peristalsis in the intestinal wall.

Diphenoxylate acts on the smooth muscle of the intestinal tract to inhibit GI motility and excessive propulsion of the GI tract (peristalsis). Diphenoxylate is an active ingredient of commonly available antimotility agents. Its indication is for the treatment of diarrhea in adults and children 13 years or older, or as add-on therapy in the management of acute non-infectious diarrhea.

- **Option A:** By acting on the presynaptic opioid receptors, it blocks the release of acetylcholine in the synaptic cleft and hence inhibits the motility and secretory action of the enteric nervous system. This action leads to a decrease in segmental contractions and prolongation of gastrointestinal transit time. Diphenoxylate reduces the epithelial secretion of fluid and electrolytes and enhances active absorption by mild action on delta receptors.
- **Option B:** It does not have analgesic effects of morphine at standard doses, but at higher doses, it can lead to CNS effects, like euphoria. The drug can have a misuse potential if used for a prolonged time and classified as Schedule V drug under Food and Drug Administration.
- **Option D:** Diphenoxylate can precipitate GI complications, including sepsis and prolonged diarrhea, when administered in patients with infectious diarrhea. This effect is because of the prolongation of GI transit time and decreased GI motility, which leads to bacterial overgrowth and release of enterotoxins into the bloodstream, creating a septic shock-like picture.

53. Which is the most appropriate action for the nurse to take before administering digoxin?

A. Monitor potassium level.

B. Assess blood pressure.

C. Evaluate urinary output.

D. Avoid giving with thiazide diuretic.

Correct Answer: A. Monitor potassium level.

Monitoring potassium is especially important because hypokalemia potentiates digoxin toxicity. Digoxin exhibits its therapeutic and toxic effects by poisoning the sodium-potassium ATPase. The subsequent increase in intracellular sodium leads to increased intracellular calcium by decreasing calcium expulsion through the sodium-calcium, cation exchanger. Blood pressure and urinary output are incorrect because these data reflect overall CV status but are not specific for digoxin.

- **Option B:** Higher intracellular calcium increases inotropy which can be of symptomatic benefit in CHF. At toxic levels, automaticity can be increased as well. Digoxin also increases vagal tone by decreasing dromotropy at the AV node. This can be used to control atrial tachydysrhythmias.
- **Option C:** Gastrointestinal upset is the most common symptom of digoxin toxicity. Patients also may report visual symptoms, which classically present as a yellow-green discoloration, and cardiovascular symptoms, such as palpitations, dyspnea, and syncope. Elderly patients frequently will present with vague symptoms, such as dizziness and fatigue. The most important historical detail in evaluating a random digoxin level is the time of the last dose.
- **Option D:** Thiazide diuretics are usually administered with digoxin. Among patients taking digoxin (Lanoxin), low levels of potassium caused by concurrent digoxin and diuretics (thiazide & loop diuretics) may cause weakness, cramps, and irregular heartbeats.

54. The nurse and unlicensed assistive personnel (UAP) are caring for a client with right-sided paralysis. Which action by the UAP requires the nurse to intervene?

A. The assistant places a gait belt around the client's waist prior to ambulating.

B. The assistant places the client on the back with the client's head to the side.

C. The assistant places her hand under the client's right axilla to help him/her move up in bed.

D. The assistant praises the client for attempting to perform ADL's independently.

Correct Answer: C. The assistant places her hand under the client's right axilla to help him/her move up in bed.

This action is inappropriate and would require intervention by the nurse because pulling on a flaccid shoulder joint could cause shoulder dislocation; as always use a lift sheet for the client and nurse safety. Avoid pulling the affected arm. Place a hand behind the scapula when moving the upper extremity instead of pulling from the arm; Utilize a lift sheet during bed repositioning. When the patient is sitting provide the arm with a firm support surface

- **Option A:** Provide instructions on transfer techniques utilizing the stronger extremity to move the weaker extremity. For example, to move the affected leg in bed or when changing from a lying to a sitting position, slide the unaffected foot under the
affected ankle to lift, support, and bring the affected leg along in the desired movement.
- **Option B:** Assist the patient with head control, and position based on specific dysfunction. Counteracts hyperextension, aiding in prevention of aspiration and enhancing ability to swallow.

Optimal positioning can facilitate intake and reduce risk of aspiration head back for decreased posterior propulsion of tongue, head turned to weak side for unilateral pharyngeal paralysis, lying down on either side for reduced pharyngeal contraction.

- **Option D:** Avoid doing things for the patient that the patient can do for self, but provide assistance as necessary. To maintain self-esteem and promote recovery, it is important for the patient to do as much as possible for self. These patients may become fearful and independent, although assistance is helpful in preventing frustration.

55. The following medications will likely be prescribed for the client except:

A. Prozac

B. Tofranil

C. Parnate

D. Zyprexa

Correct Answer: D. Zyprexa

This is an antipsychotic. Olanzapine is a second-generation (atypical) antipsychotic medication. Olanzapine also has approval for use with fluoxetine, a selective serotonin reuptake inhibitor (SSRI), in patients with episodes of depression associated with bipolar disorder type 1 and treatment-resistant depression. It is important to note that olanzapine is not FDA approved for patients under the age of 13, and the combination of olanzapine with fluoxetine does not have approval for patients under the age of 10.

- **Option A:** Prozac is a SSRI antidepressant. Fluoxetine has FDA-approval for major depressive disorder (age eight and older), obsessive-compulsive disorder (age seven and older), panic disorder, bulimia, binge eating disorder, premenstrual dysphoric disorder, bipolar depression (as an adjunct with olanzapine also known as Symbyax), and treatment-resistant depression when used in combination with olanzapine.
- **Option B:** Tofranil antidepressant belongs to the Tricyclic group. Imipramine is a tertiary amine tricyclic antidepressant. Tricyclic antidepressants (TCAs) had been approved by the Food and Drug Administration (FDA) as antidepressants in the 1950s. Although it is FDA approved for the treatment of depression, it is a second-line treatment notably in severe depression with melancholic and atypical features, due to its undesirable side effects and due to its toxicity in overdose.
- **Option C:** Parnate is a MAOI antidepressant. The main FDA-approved indication of tranylcypromine is for major depressive disorder without melancholia. The non-FDA-approved indications for this medication include treatment-resistant depression, treatment-resistant social anxiety disorder, treatment-resistant panic disorder, and atypical depression. Atypical depression consists of hyperphagia, hypersomnia, rejection sensitivity, and leaden paralysis accompanying the depression.

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

A. docusate Sodium (Colace)

B. methylcellulose (Citrucel)

C. polycarbophil (Fibercon)

D. psyllium (Metamucil)

Correct Answer: A. Docusate Sodium (Colace)

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

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

57. A client is admitted to the hospital with a diagnosis of major depression, severe, single episode. The nurse assesses the client and identifies a nursing diagnosis of imbalanced nutrition related to poor nutritional intake. The most appropriate nursing intervention related to this diagnosis is:

A. Explain to the client the importance of a good nutritional intake.

B. Weight the client 3 times per week before breakfast.

C. Report the nutritional concern to the psychiatrist and obtain a nutritional consultation as soon as possible.

D. Consult with the nutritionist, offer the client several small meals per day, and schedule brief nursing interactions with the client during these times.

Correct Answer: D. Consult with the nutritionist, offer the client several small meals per day and schedule brief nursing interactions with the client during these times.

Change in appetite is one of the major symptoms of depression. Weight the client weekly and observe the eating patterns of the client. Give the information needed for revising the intervention. Encourage eating with others. This increases socialization, decreases focus on the food.

- **Option A:** Encourage small, high-calorie, and high-protein snacks and fluids frequently throughout the day and evening if weight loss is noted. This minimizes weight loss, constipation, and dehydration. Serve foods or drinks the client likes. Clients are more likely to eat foods they like.
- **Option B:** Help the client identify negative thinking/thoughts. Teach the client to reframe and/or refute negative thoughts. Negative ruminations add to feelings of hopelessness and are part of a depressed person’s faulty thought processes. Intervening in this process helps in a healthier and more useful outlook in life.
- **Option C:** Reporting to the psychiatrist and nutritionist is to some degree correct but lacks the method as to how one would increase food intake. Allow more time than usual for the client to finish usual activities of daily living (ADL) (e.g., eating, dressing). Usual tasks might take long periods of time; demands that the client hurry only increases anxiety and slow down the ability to think clearly.

58. A nurse reinforces instructions to the mother of a child who has been hospitalized with croup. Which of the following statements, if made by the mother, would indicate the need for further instruction? Select all that apply.

A. "I will give my child cough syrup if a cough develops."

B. "During an attack, I will take my child to a cool location."

C. "I will give acetaminophen (Tylenol) if my child develops a fever."

D. "I will be sure that my child drinks at least three to four glasses of fluids every day."

E. “I will place my child in a room with dry air.”

F. “I will let my child sit under the shower until the cough subsides.”

Correct Answer: A, E, & F.

Croup is a common respiratory illness of the trachea, larynx, and bronchi that can lead to inspiratory stridor and barking cough. The parainfluenza virus typically causes croup, but a bacterial infection can also cause it. Croup is primarily a clinical diagnosis.

- **Option A:** Cough syrups and cold medicines are not to be given, because they may dry and thicken secretions. Cough medicines, which usually contain dextromethorphan or guaifenesin, are discouraged.
- **Option B:** During a croup attack, the child can be taken to a cool basement or garage. Provide a calm, quiet environment for the child. Anxiety affects respirations and a calm environment lessens anxiety.
- **Option C:** Acetaminophen is used if a fever develops. Educate the parents on the administration and uses of prescribed medications. This facilitates appropriate medication administration and recognition of adverse side effects.
- **Option D:** Adequate hydration of 500 to 1000 mL of fluids daily is important for thinning secretions. Advise increase fluid intake and maintain intravenous fluid as prescribed. Adequate hydration can help loosen mucus in the oropharynx and prevent dehydration.
- **Option E:** Have the child breathe moist air. Warm, moist air may help the child breathe easier. Cool mist and humidity soothe inflamed airways and decrease the viscosity of the mucus thus helps in clearing the airway.
- **Option F:** If the child has symptoms of croup, take him into the bathroom, close the bathroom door, and turn on a hot shower. Do not put your child under the shower. Sit with the child in the warm, moist air for 15 to 20 minutes.

59. A client is admitted for treatment of the syndrome of inappropriate antidiuretic hormone (SIADH). Which nursing intervention is appropriate?

A. Infusing I.V. fluids rapidly as ordered.

B. Encouraging increased oral intake.

C. Restricting fluids.

D. Administering glucose-containing I.V. fluids as ordered.

Correct Answer: C. Restricting fluids.

To reduce water retention in a client with SIADH, the nurse should restrict fluids.

- **Option A:** Rapid infusion of IV fluids would further increase the client’s overload.
- **Option B:** The client should be instructed to restrict his fluid intake. It is also important to restrict sodium intake because higher correction rates have been associated with osmotic demyelination.
- **Option D:** Administering fluids by any route would further increase the client’s already heightened fluid load.

60. A nurse is working with a client who has schizophrenia, paranoid type. Which of the following outcomes related to the client's delusional perceptions would the nurse establish?

A. The client will demonstrate realistic interpretation of daily events in the unit.

B. The client will perform daily hygiene and grooming without assistance.

C. The client will take prescribed medications without difficulty.

D. The client will participate in unit activities.

Correct Answer: A. The client will demonstrate realistic interpretation of daily events in the unit.

A client with schizophrenia, paranoid type, has distorted perceptions and views people, institutions, and aspects of the environment as plotting against him. The desired outcome for someone with delusional perceptions would be to have a realistic interpretation of daily events. Unlike DSM-5, ICD-10 further subcategories schizophrenia based on the key presenting symptoms as either paranoid schizophrenia, hebephrenic schizophrenia, catatonic schizophrenia, undifferentiated schizophrenia, post-schizophrenic depression, residual schizophrenia, and simple schizophrenia.

- **Option B:** The client with a distorted perception of the environment would not necessarily have impairments affecting hygiene and grooming skills. A thorough risk assessment must also be undertaken to determine the risk of harm to self and others. The first schizophrenic episode usually occurs during early adulthood or late adolescence. Individuals often lack insight at this stage; therefore few will present directly to seek help for their psychotic symptoms.
- **Option C:** For the initial treatment of acute psychosis, it is recommended to commence an oral second-generation antipsychotic (SGA) such as aripiprazole, olanzapine, risperidone, quetiapine, asenapine, lurasidone, sertindole, ziprasidone, brexpiprazole, molindone, iloperidone, etc. Sometimes, if clinically needed, alongside a benzodiazepine such as diazepam, clonazepam or lorazepam to control behavioral disturbances and non-acute anxiety. First generation antipsychotic (FGA) like trifluoperazine, Fluphenazine, haloperidol, pimozide, sulpiride, flupentixol, chlorpromazine, etc. are not commonly used as the first line but can be used.
- **Option D:** Although taking medications and participating in unit activities may be appropriate outcomes for nursing intervention; these responses are not related to client perceptions. Cognitive-behavioral therapy (CBT) and the use of art and drama therapies help counteract the negative symptoms of the disease, improve insight, and assist relapse prevention.

61. A nurse is preparing for the admission of a client with heart failure who is being sent directly to the hospital from the physician's office. The nurse would plan on having which of the following medications readily available for use?

A. diltiazem (Cardizem)

B. digoxin (Lanoxin)

C. propranolol (Inderal)

D. metoprolol (Lopressor)

Correct Answer: B. digoxin (Lanoxin)

Digoxin exerts a positive inotropic effect on the heart while slowing the overall rate through a variety of mechanisms. Digoxin is the medication of choice to treat heart failure. Digoxin is beneficial in patients

with systolic heart failure, better known as heart failure with reduced ejection fraction (HFrEF), with an ejection fraction below 40%. It is used for rate control in atrial fibrillation or atrial flutter when conventional therapies have not achieved goal heart rate.

- **Option A:** Diltiazem is an oral and parenteral non-dihydropyridine calcium channel blocker. It is used in many clinical scenarios as an antihypertensive, anti-arrhythmic, and as antianginal. Diltiazem is a negative inotrope (decreased force) and negative chronotropic (decreased rate). The combination, along with coronary artery vasodilation, leads to decreased myocardial oxygen demand, decreased heart rate, and reduced blood pressure.
- **Option C:** Propranolol can be used to ameliorate the sympathetic response in angina, tachyarrhythmias, prevention of acute ischemic attacks, migraine prophylaxis, and restless leg syndrome. Propranolol can be used in almost all cases if the desired result is to slow contractility and decrease a patient's heart rate. It exerts its response by competitively blocking beta-1 and beta-2 adrenergic stimulation in the heart, which is typically induced by epinephrine and norepinephrine.
- **Option D:** Metoprolol (a beta-blocker) has a negative inotropic effect and would worsen the failing heart. Metoprolol is a cardioselective beta-1-adrenergic receptor inhibitor that competitively blocks beta1-receptors with minimal or no effects on beta-2 receptors at oral doses of less than 100 mg in adults. It decreases cardiac output by negative inotropic and chronotropic effects.

62. A male client has just been diagnosed with type 1 diabetes mellitus. When teaching the client and family how diet and exercise affect insulin requirements, Nurse Joy should include which guideline?

A. "You'll need more insulin when you exercise or increase your food intake."

B. "You'll need less insulin when you exercise or reduce your food intake."

C. "You'll need less insulin when you increase your food intake."

D. "You'll need more insulin when you exercise or decrease your food intake."

Correct Answer: B. "You'll need less insulin when you exercise or reduce your food intake."

Exercise, reduced food intake, hypothyroidism, and certain medications decrease the insulin requirements. Growth, pregnancy, greater food intake, stress, surgery, infection, illness, increased insulin antibodies, and certain medications increase the insulin requirements. Exercise in patients with diabetes mellitus promotes cardiovascular benefits by reducing cardiovascular risk and mortality, assists with weight management, and it improves glycemic control. The increased tissue sensitivity to insulin produces a beneficial effect on glycemic control.

- **Option A:** Patients with well-controlled diabetes on insulin regimen; higher serum insulin concentration is noted during exercise due to increased temperature and blood flow leading to increased absorption from subcutaneous depots. Exogenous insulin can't be shut off. Hence, these patients have a drop in blood glucose levels much larger than in normal individuals.
- **Option C:** An exercise program leads to increased activity of mitochondrial enzymes, increased insulin sensitivity, and muscle capillary recruitment. Adding resistance training to aerobic exercise provides an additional benefit of increased insulin sensitivity.
- **Option D:** Use insulin about 60 to 90 minutes before exercise to prevent increased insulin absorption along with injecting in a site other than muscle to be exercised. For example, inject into arms when cycling exercise and into the abdomen when the exercise involves both the arms and legs.

63. The following are nursing measures to stimulate lactation, except:

A. Frequent regular breastfeeding

B. Breast pumping

C. Breast massage

D. Application of cold compress on the breast

Correct Answer: D. Application of cold compress on the breast

To stimulate lactation, a warm compress is applied to the breast. A cold application will cause vasoconstriction thus reducing the blood supply consequently the production of milk.

- **Option A:** Make sure that the baby is latching on to the breast correctly. Latching the baby on properly is the most efficient way to increase the supply. A poor latch is often the main reason a mother's supply of breast milk isn't as abundant as it can be. Without a proper latch, the baby cannot remove the milk from the breast well.
- **Option B:** Use a breast pump or a hand expression technique to continue to stimulate the breasts after finishing breastfeeding the baby. The extra stimulation will tell the woman's body that she needs more breast milk.
- **Option C:** Starting about two months before the date the baby is expected to join the family, if time permits, introducing a routine of stimulus and expression for the breasts can help with milk production. Gently massage the breasts by hand for a few minutes, then use a hospital-grade (multi-user) double electric breast pump for about 10 minutes more. Do this after waking, before going to sleep, and several times throughout the day for the body to begin reacting to the implied "demand" for breast milk. Drops of milk usually appear, on average, about a month or so after starting this routine, and milk supply typically builds over time.

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

A. "We are not permitted to date clients."

B. "No, you are a client and I am a nurse."

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

D. "It's against my professional ethics to date clients."

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

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

- **Option A:** Keep in mind clients with personality disorders might defend against feelings of low-self-esteem through blaming, projection, anger, passivity, and demanding behaviors. Many behaviors seen in PD clients cover a fragile sense of self. Often these behaviors are the crux of clients' interpersonal difficulties in all their relationships.

- **Option B:** Focus questions in a positive and active light; helps client refocus on the present and look to the future. For example, “What can you do differently now?” or “What have you learned from that experience?”. Allows the client to look at past behaviors differently, and gives the client a sense that he or she has choices in the future.
- **Option D:** Give the client honest and genuine feedback regarding your observations as to his or her strengths, and areas that could use additional skills. Feedback helps give clients a more accurate view of self, strengths, areas to work on, as well as a sense that someone is trying to understand them.

65. The nurse is assessing a client with an endotracheal tube and observes that the client can make verbal sounds. What is the most likely cause of this?

A. This is a normal finding.

B. There is a leak.

C. There is an occlusion.

D. The endotracheal tube is displaced.

Correct Answer: B. There is a leak.

When conducting the minimal leak technique the client should not be able to make verbal sounds or no air should be felt coming out of the client’s mouth. Because the cuff blocks the flow of air around the tube, speech is not possible. Once the tube is removed (called extubation), the patient will be able to speak. The voice may sound hoarse and the patient may have some throat discomfort for the first few days.

- **Option A:** Verbal sounds in an intubated patient is not a normal finding. As long as the patient has an endotracheal tube in place, the cuff will need to be inflated. An inflated cuff will prevent the patient from being able to speak. Speech is produced when we exhale air through the vocal cords, causing them to vibrate.
- **Option C:** Without a gag reflex, saliva would enter the windpipe. This is called aspiration. It was hypothesized that the high minute volume of patients contributes to the inspissation of secretions. It is also possible that some characteristic of the Pneumocystis organism in secretions causes altered adherence characteristics of the sputum, resulting in this problem.
- **Option D:** If the patient has complete obstruction of the upper airway, a displaced tracheostomy tube will result in immediate respiratory distress and can lead to respiratory arrest. If the patient has an intact or at least a partially open upper airway, the displaced tube may not cause an immediate problem. Therefore, displacement of the tracheostomy tube may not be obvious in the patient with a partial airway.

66. A physician diagnoses a client with myasthenia gravis, prescribing pyridostigmine (Mestinon), 60 mg P.O. every 3 hours. Before administering this anticholinesterase agent, the nurse reviews the client’s history. Which preexisting condition would contraindicate the use of pyridostigmine?

A. Ulcerative colitis

B. Blood dyscrasia

C. Intestinal obstruction

D. Spinal cord injury

Correct Answer: C. Intestinal obstruction

Anticholinesterase agents such as pyridostigmine are contraindicated in a client with a mechanical obstruction of the intestines or urinary tract, peritonitis, or hypersensitivity to anticholinesterase agents. Pyridostigmine bromide is preferred over neostigmine because of its longer duration of action. In those with bromide intolerance that leads to gastrointestinal effects, ambenonium chloride can be used. Patients with MuSK MG respond poorly to these drugs and hence may require higher doses.

- **Option A:** Ulcerative colitis is not a contraindication to pyridostigmine. The mainstay of treatment in MG involves cholinesterase enzyme inhibitors and immunosuppressive agents. Symptoms that are resistant to primary treatment modalities or those requiring rapid resolution of symptoms (myasthenic crisis), plasmapheresis, or intravenous immunoglobulins can be used.
- **Option B:** Blood dyscrasia is not a contraindication to pyridostigmine. Agricultural employees who handle organophosphates for a prolonged period should have medical monitoring. Appropriate testing is recommended to identify overexposure before the occurrence of clinical illness. Both serum and RBC cholinesterase must be determined.
- **Option D:** The contraction of the smooth muscle in various organs of the body gets mediated through M3 receptors. Tone and peristalsis in the gastrointestinal tract increase and sphincters relax, causing abdominal cramps and evacuation of the bowel. The detrusor muscle contracts while the bladder trigone and sphincter relax, leading to the voiding of the bladder.

67. The most serious adverse effect of Alprostadil (Prostin VR pediatric injection) administration in neonates is:

A. Bleeding tendencies.

B. Apnea.

C. Hypotension.

D. Pyrexia.

Correct Answer: B. Apnea.

All items are adverse reactions of the drug. However, apnea appearing during the first hour of drug infusion occurs in 10-12 percent of neonates with congenital heart defects. Clinicians deciding to utilize alprostadil must be prepared to intubate and mechanically ventilate the infant. Careful monitoring for apnea or respiratory depression is mandatory. In some institutions, elective intubation occurs prior to the initiation of the medication.

- **Option A:** Alprostadil inhibits platelet aggregation and therefore can increase the risk of bleeding. Use intravenous alprostadil cautiously in patients with bleeding tendencies or receiving anticoagulant therapy. Additionally, caution should be used in patients at risk of coagulopathy.
- **Option C:** Alprostadil is known to cause hemodynamic instability causing hypotension/hypertension, and flushing. It is advisable to monitor blood pressure, heart rate, and temperature before and after the use of the drug.
- **Option D:** Alprostadil is a prostaglandin used to maintain patent ductus arteriosus in neonates with ductus arteriosus dependent congenital heart malformations. Alprostadil administration results in fever in ?14% of treated neonates. The occurrence of fever in this setting often leads to extensive investigations to identify the source of fever, as well as to empiric antibiotic therapy and the postponement of cardiac surgery. These measures can lead to several neonatal complications.

68. A 72-year-old client presents to the emergency department post a minor fall at home, now manifesting a significant loss of coordination in motor movements and a staggering, wide-based gait. The patient's family reports a progressive worsening of these symptoms over the last few months, along with a recent history of tremors. Neurological examination reveals dysdiadochokinesia and intention tremor. Given the symptomatology and the clinical presentation, an intrinsic lesion or degenerative condition affecting which of the following brain regions is most likely responsible for the observed motor abnormalities?

A. Medulla Oblongata

B. Cerebrum

C. Pons

D. Cerebellum

Correct Answer: D. Cerebellum
The cerebellum is primarily involved in the coordination of voluntary motor movements, balance, and proprioception. Pathology affecting the cerebellum, such as degenerative conditions or intrinsic lesions, can result in a characteristic ataxic gait, intention tremors, and other signs of cerebellar dysfunction as demonstrated in this patient. The cerebellum's role in fine-tuning motor movements and ensuring smooth, coordinated actions makes it the most likely site of pathology given the clinical presentation.

- **Option A:** The medulla oblongata is a critical area of the brainstem involved in autonomic control including cardiac and respiratory function, as well as reflexive functions such as coughing, vomiting, and sneezing. While damage to the medulla can result in severe neurologic deficits, it's not typically associated with the loss of coordination and wide-based gait observed in the patient.
- **Option B:** The cerebrum is involved in multiple higher-order functions including voluntary motor movements, sensory perception, and cognitive functions. While certain lesions or conditions affecting the motor cortex or other regions of the cerebrum can lead to motor abnormalities, the specific pattern of ataxia, dysdiadochokinesia, and intention tremor is more characteristic of cerebellar dysfunction.
- **Option C:** The pons is a part of the brainstem that relays information between the cerebrum and the cerebellum, and houses nuclei important for cranial nerve function and arousal. While it plays a role in some motor functions via pontine nuclei, it is not the primary site implicated in the observed motor coordination deficits and ataxic gait.

69. A male client who is recovering from surgery has been advanced from a clear liquid diet to a full liquid diet. The client is looking forward to the diet change because he has been "bored" with the clear liquid diet. The nurse would offer which full liquid item to the client?

A. Tea

B. Gelatin

C. Custard

D. Popsicle

Correct Answer: C. Custard

Full liquid food items include items such as plain ice cream, sherbet, breakfast drinks, milk, pudding, and custard, soups that are strained, and strained vegetable juices. A clear liquid diet consists of foods that are relatively transparent. A patient prescribed a full liquid diet follows a specific diet type requiring all liquids and semi-liquids but no forms of solid intake.

- **Option A:** Tea is included in the clear liquid diet. Unlike a clear liquid diet, which includes only liquids and semi-liquids that are non-opaque, a full liquid diet is more inclusive, as it allows all types of liquids.
- **Option B:** A clear liquid diet is a specific dietary plan that only includes liquids that are fully transparent at room temperature. Some items that may be allowed include water, ice, fruit juices without pulp, sports drinks, carbonated drinks, gelatin, tea, coffee, clear broths, and clear ice pops.
- **Option D:** A popsicle is included in the clear liquid diet. The clear liquid diet assists in maintaining hydration, it provides electrolytes and calories, and offers some level of satiety when a full diet is not appropriate, but may struggle to provide adequate caloric needs if employed for more than five days.

70. With regard to small-for-gestational-age (SGA) infants and intrauterine growth restriction (IUGR), nurses should be aware that:

A. In the first trimester, diseases or abnormalities result in asymmetric IUGR.

B. Infants with asymmetric IUGR have the potential for normal growth and development.

C. In asymmetric IUGR, weight is slightly more than SGA, whereas length and head circumference are somewhat less than SGA.

D. Symmetric IUGR occurs in the later stages of pregnancy.

Correct Answer: B. Infants with asymmetric IUGR have the potential for normal growth and development.

The infant with asymmetric IUGR has the potential for normal growth and development. SGA infants have reduced brain capacity. The asymmetric form occurs in the later stages of pregnancy.

- **Option A:** IUGR is either symmetric or asymmetric. The symmetric form occurs in the first trimester, as a result of disease or abnormalities.
- **Option C:** Weight is less than the 10th percentile, but the head circumference is greater than the 10th percentile (within normal limits).
- **Option D:** IUGR is either symmetric or asymmetric. The symmetric form occurs in the first trimester, as a result of disease or abnormalities.

71. The clinical instructor asks her students the rationale for handwashing. The students are correct if they answered that handwashing is expected to remove:

A. Transient flora from the skin

B. Resident flora from the skin

C. All microorganisms from the skin

D. Media for bacterial growth

Correct Answer: A. Transient flora from the skin

There are two types of normal flora: transient and resident. Transient flora are normal flora that a person picks up by coming in contact with objects or another person (e.g., when you touch a soiled dressing). You can remove these with hand washing. Hand washing can prevent about 30% of diarrhea-related illnesses and about 20% of respiratory infections (e.g., colds). Antibiotics often are prescribed unnecessarily for these health issues

- **Option B:** Resident flora live deep in skin layers where they live and multiply harmlessly. They are permanent inhabitants of the skin and cannot usually be removed with routine hand washing.
- **Option C:** Removing all microorganisms from the skin (sterilization) is not possible without damaging the skin tissues. To live and thrive in humans, microbes must be able to use the body's precise balance of food, moisture, nutrients, electrolytes, pH, temperature, and light.
- **Option D:** Food, water, and soil that provide these conditions may serve as nonliving reservoirs. Hand washing does little to make the skin uninhabitable for microorganisms, except perhaps briefly when an antiseptic agent is used for cleansing. Handwashing with soap could protect about 1 out of every 3 young children who get sick with diarrhea and almost 1 out of 5 young children with respiratory infections like pneumonia.

72. 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.

73. The characteristic manifestation that will differentiate bulimia nervosa from anorexia nervosa is that bulimic individuals:

A. Have episodic binge eating and purging.

B. Have repeated attempts to stabilize their weight.

C. Have peculiar food handling patterns.

D. Have threatened self-esteem.

Correct Answer: A. Have episodic binge eating and purging

Bulimia is characterized by binge eating which is characterized by taking in a large amount of food over a short period of time. Bulimia nervosa is a condition that occurs most commonly in adolescent females, characterized by indulgence in binge-eating, and inappropriate compensatory behaviors to prevent weight gain. Patients are eating portions more significant than what most people would consume in a similar period (usually less than 2 hours) and under comparable conditions. Binging episodes are followed by inappropriate compensatory behavior to prevent weight gain. The episodes should occur at least once a week for three months to establish a diagnosis.

- **Option B:** The success of many professions depends on a person's weight. Models and actors portray a level of thinness that is difficult to attain, and it is enhanced by make-up and photographic alterations. Athletes in sports such as ballet, long-distance running, and martial arts are pressured to maintain lean body weights to outperform the competition. Media outlets promote diet secrets and weight loss tips in excess. Populations such as maturing females identify thin body types with increased self-esteem and link weight loss with self-control.
- **Option C:** Patients with anorexia nervosa have altered brain function and structure there are deficits in neurotransmitters dopamine (eating behavior and reward) and serotonin (impulse control and neuroticism), differential activation of the corticolimbic system (appetite and fear), and diminished activity among the frontostriatal circuits (habitual behaviors).
- **Option D:** Low esteem is noted in both eating disorders. Anorexia nervosa (AN) mainly affects girls or women between 13 and 45 years of age. According to previous studies, one of the reasons for the desire to be thin is low self-esteem. Low self-esteem is commonly experienced among individuals with eating disorders, which can complicate the recovery process. For many people with eating disorders, the experience of low self-esteem can trigger the development of an eating disorder or influence behaviors that create a chaotic relationship with food and the body.

74. A community health nurse is conducting an educational session with community members regarding TB. The nurse tells the group that one of the first symptoms associated with TB is:

A. A bloody, productive cough

B. A cough with the expectoration of mucoid sputum

C. Chest pain

D. Dyspnea

Correct Answer: B. A cough with the expectoration of mucoid sputum

One of the first pulmonary symptoms includes a slight cough with the expectoration of mucoid sputum. A chronic cough, hemoptysis, weight loss, low-grade fever, and night sweats are some of the most common physical findings in pulmonary tuberculosis. Other options are late symptoms and signify

cavitation and extensive lung involvement.

- **Option A:** As the bacterium begins multiplying in the body and destroying tissue, it causes symptoms such as a bad, persistent cough, fatigue/loss of energy, weight loss, loss of appetite, chills, fever, drenching night sweats, chest pain, and coughing up or spitting up bright red blood, a symptom that occurs when the blood vessels inside the lungs become eroded and begin to bleed.
- **Option C:** Pulmonary or systemic dissemination of the tubercles may be seen in active disease, and this may manifest as miliary tuberculosis characterized by millet-shaped lesions on chest x-ray. Disseminated tuberculosis may also be seen in the spine, the central nervous system, or the bowel.
- **Option D:** Secondary tuberculosis differs in clinical presentation from the primary progressive disease. In secondary disease, the tissue reaction and hypersensitivity is more severe, and patients usually form cavities in the upper portion of the lungs.

75. Crohn's disease can be described as a chronic relapsing disease. Which of the following areas in the GI system may be involved with this disease?

A. The entire length of the large colon.

B. Only the sigmoid area.

C. The entire large colon through the layers of mucosa and submucosa.

D. The small intestine and colon; affecting the entire thickness of the bowel.

Correct Answer: D. The small intestine and colon; affecting the entire thickness of the bowel

Crohn's disease can involve any segment of the small intestine, the colon, or both, affecting the entire thickness of the bowel. In Crohn's disease, the inflammation extends through the entire thickness of the bowel wall from the mucosa to the serosa. The disease runs a relapsing and remitting course.

- **Option A:** Ulcerative colitis is an idiopathic inflammatory condition of the colon which results in diffuse friability and superficial erosions on the colonic wall and associated bleeding. It is the most common form of inflammatory bowel disease worldwide.
- **Option B:** Diverticula can form while straining during a bowel movement, such as with constipation. They are most common in the lower portion of the large intestine (called the sigmoid colon). Diverticulosis is very common and occurs in 10% of people over age 40 and in 50% of people over age 60.
- **Option C:** Characteristically, it involves inflammation restricted to the mucosa and submucosa of the colon. Typically, the disease starts in the rectum and extends proximally in a continuous manner. In the United States, the disease accounts for a quarter-million clinician visits annually.

76. Walter, a teenage patient is admitted to the hospital because of acetaminophen (Tylenol) overdose. Overdoses of acetaminophen can precipitate life-threatening abnormalities in which of the following organs?

A. Lungs

B. Liver

C. Kidney

D. Adrenal Glands

Correct Answer: B. Liver

Acetaminophen is extensively metabolized by pathways in the liver. Toxic doses of acetaminophen deplete hepatic glutathione, resulting in accumulation of the intermediate agent, quinine, which leads to hepatic necrosis. Prolonged use of acetaminophen may result in an increased risk of renal dysfunction, but a single overdose does not precipitate life-threatening problems in the respiratory system, renal system, or adrenal glands.

- **Option A:** Acetaminophen is rapidly absorbed from the gastrointestinal (GI) tract and reaches therapeutic levels in 30 minutes to 2 hours. Overdose levels peak at 4 hours unless other factors could delay gastric emptying, such as a co-ingestion of an agent that slows gastric motility, or if the acetaminophen is in an extended-release form.
- **Option C:** In the third stage (72 hours to 96 hours), liver dysfunction is significant with renal failure, coagulopathies, metabolic acidosis, and encephalopathy. Acetaminophen has an elimination half-life of 2 hours, but can be as long as 17 hours in patients with hepatic dysfunction. It is metabolized by the liver, where it is conjugated to nontoxic, water-soluble metabolites that are excreted in the urine.
- **Option D:** Metabolism primarily occurs through glucuronidation and sulfation, both of which occur in the liver. In an overdose, these pathways are saturated, and more acetaminophen is subsequently metabolized to NAPQI by cytochrome P450. NAPQI is a toxic substance that is safely reduced by glutathione to nontoxic mercaptate and cysteine compounds, which are then renally excreted. An overdose depletes the stores of glutathione, and once they reach less than 30% of normal, NAPQI levels increase and subsequently bind to hepatic macromolecules causing hepatic necrosis. This is irreversible.

77. A patient's unresolved feelings related to loss would be most likely observed during which phase of the therapeutic nurse-patient relationship?

A. Trusting

B. Working

C. Orientation

D. Termination

Correct Answer: D. Termination

In the termination phase, the relationship comes to a close. Ending treatment sometimes may be traumatic for patients who have come to value the relationship and the help. Because loss is an issue, any unresolved feelings related to loss may resurface during this phase.

- **Option A:** Sometimes during the working phase of the relationship, the nurse may choose to self-disclose information about themselves to relate to the client. Limited self-disclosure may be beneficial when it helps the client express their feelings as they relate their experience to what the nurse has disclosed. Sharing personal information with a client can deepen trust.
- **Option B:** Within this phase, relevant treatment goals are established to guide nursing interventions and client actions, and the conversation in the working phase turns to active problem solving related to assessed needs. Clients can more deeply disclose concerns/issues that they are having.
- **Option C:** The nurse begins to build a sense of trust by providing the client with basic information (name, professional status, and essential information about the purpose and nature of the relationship). Introductions are important even when the client is confused, aphasic, unresponsive,

or unable to respond. Nonverbal supportive communication such as a handshake, eye contact, a smile, and appropriate body language reinforce spoken words.

78. Frequent PVCs are noted on the cardiac monitor of a patient with end-stage renal disease. The priority intervention is:

A. Call the doctor immediately.

B. Give the patient IV lidocaine (Xylocaine).

C. Prepare to defibrillate the patient.

D. Check the patient's latest potassium level.

Correct Answer: D. Check the patient's latest potassium level

The patient with ESRD may develop arrhythmias caused by hypokalemia. The incidence of PVCs, as well as complex PVCs in patients with ESRD, was comparable to that of the patients who had had myocardial infarction but was significantly higher than that found in low-risk subjects. The high incidence of complex PVCs in patients with ESRD may predispose them to increased cardiovascular death, and further investigation of this finding is indicated.

- **Option A:** Call the doctor after checking the patient's potassium values. The observation that two distinct patterns of arrhythmia appearance can be identified among arrhythmic dialysis patients was first made by Abe et al. They showed patients having almost constant PCV throughout the 24-h ECG recording and patients with a marked increase during dialysis and the early post-dialysis period.
- **Option B:** Lidocaine may be ordered if the PVCs are frequent and the patient is symptomatic. In conventional HD with constant and low potassium (range 0–2.5 mEq/l) a large amount of potassium is abruptly removed from the extracellular space. Most of this potassium originates from the cells, crosses the cell membrane, the extracellular space (the blood), and the dialysis membrane before reaching the dialysate. The depletion of the potassium reserves within the cells may have important repercussions on cardiac electrophysiology.
- **Option C:** Potassium fluxes during HD have been associated with an increase in QT interval, an increase in the dispersion of QT, and in the inhomogeneous repolarisation revealed by the analysis of the spatial aspects of T-wave complexity. The resulting repolarization heterogeneity allows for the onset of distinctive reentrant arrhythmias, and hypokalemia may act as a triggering factor in the genesis of premature ventricular depolarisations.

79. During a dermatological seminar at a nursing college, Professor Sinclair presented a case study of a 35-year-old musician who, after a minor injury to his finger while playing the guitar, developed a severe infection. This case led to a broader discussion about the significance of nail structures and their role in safeguarding the finger from infectious agents. Professor Sinclair posed a challenging question to the class: Amid the intricate architecture of the nail, which distinct structure acts as a sentinel, diligently warding off bacteria and detritus, thereby averting their infiltration into the interspace between the nail plate and the adjacent skin?

A. Lunula

B. Nail bed

C. Eponychium

D. Onychodermal Band

Correct Answer: C. Eponychium
Commonly referred to as the “cuticle,” the eponychium is the thin tissue layer that covers and protects the area where the nail plate meets the proximal skin of the finger. It acts as a barrier, preventing pathogens and debris from accessing and accumulating in the space under the nail.

- **Option A:** The lunula is the white, crescent-shaped area seen at the base of the nail. It’s the visible part of the nail matrix, where new nail cells are produced. While important for nail growth, the lunula does not directly act as a barrier against infections.
- **Option B:** The nail bed lies beneath the nail plate and provides nourishment to it. Though integral to nail health, it doesn’t act as the primary barrier against bacterial and debris entry.
- **Option D:** The onychodermal band, also known as the onychodermal eponychium or hyponychium, is the seal between the free edge of the nail and the skin of the fingertip. It helps in protection but is not the primary barrier where the nail plate meets the surrounding skin.

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

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

B. "Hypoxia stimulates the central chemoreceptors in the medulla that makes the client breathe."

C. "Oxygen is administered best using a non-rebreathing mask."

D. "Blood gases are monitored using a pulse oximeter."

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

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

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

81. Nurse John is aware that most crisis situations should resolve in about:

A. 1 to 2 weeks

B. 4 to 6 weeks

C. 4 to 6 months

D. 6 to 12 months

Correct Answer: B. 4 to 6 weeks

Crisis is self-limiting and lasts from 4 to 6 weeks. In mental health terms, a crisis refers not necessarily to a traumatic situation or event, but to a person's reaction to an event. One person might be deeply affected by an event while another individual suffers little or no ill effects. The Chinese word for crisis presents an excellent depiction of the components of a crisis. The word "crisis" in Chinese is formed with the characters for danger and opportunity.

- **Option A:** "People are in a state of crisis when they face an obstacle to important life goals—and obstacle that is, for a time, insurmountable by the use of customary methods of problem-solving." (Caplan, 1961). A crisis can sometimes be quite obvious, such as a person losing his or her job, getting divorced, or being involved in some type of accident. In other cases, a personal crisis might be less apparent but can still lead to dramatic changes in behavior and mood.
  Option C: "Crisis is a perception or experience of an event or situation as an intolerable difficulty that exceeds the person's current resources and coping mechanisms." (James and Gilliland, 2001). It's important to lean on friends, family, and loved ones during a crisis, but you should also seek professional help if you need it. Consider talking to your doctor about what you are dealing with.
- **Option D:** If you are coping with a crisis, whether it's emotional or situational, there are things that you can do to help ensure your psychological and physical well-being during this difficult time of your life. Focus on what's important at the moment. This can mean getting yourself out of an unsafe situation or it can mean just focusing on the basics so that you can get through each day. Avoid taking on too much and conserve your energy so you can deal with the problem you are facing.

82. A 77-year-old male client is admitted with a diagnosis of dehydration and change in mental status. He's being hydrated with I.V. fluids. When the nurse takes his vital signs, she notes he has a fever of 103°F (39.4°C) a cough producing yellow sputum and pleuritic chest pain. The nurse suspects this client may have which of the following conditions?

A. Adult respiratory distress syndrome (ARDS)

B. Myocardial infarction (MI)

C. Pneumonia

D. Tuberculosis

Correct Answer: C. Pneumonia

Fever, productive cough, and pleuritic chest pain are common signs and symptoms of pneumonia.

- **Option A:** The client with ARDS has dyspnea and hypoxia with worsening hypoxia over time, if not treated aggressively.
- **Option B:** Pleuritic chest pain varies with respiration, unlike the constant chest pain during an MI; so this client most likely isn't having an MI.
- **Option D:** The client with TB typically has a cough producing blood-tinged sputum. A sputum culture should be obtained to confirm the nurse's suspicions.

83. A client has had a unilateral adrenalectomy to remove a tumor. To prevent complications, the most important measurement in the immediate postoperative period for the nurse to take is:

A. Blood pressure

B. Temperature

C. Output

D. Specific gravity

Correct Answer: A. Blood pressure

Blood pressure is the best indicator of cardiovascular collapse in the client who has had an adrenal gland removed. The remaining gland might have been suppressed due to the tumor activity. Primary adrenal insufficiency occurs after bilateral adrenalectomy. Signs and symptoms are volume depletion, hypotension, hyponatremia, hyperkalemia, fever, abdominal pain. Patients are managed by replacement therapy based on glucocorticoids (hydrocortisone or cortisone), mineralocorticoids (fludrocortisone) in cases of confirmed corticoids or aldosterone deficiency, respectively.

- **Option B:** Temperature would be an indicator of infection. Patients in the adrenal crisis typically present with profoundly impaired well-being, hypotension, nausea and vomiting, and fever responding well to parenteral hydrocortisone administration. Infections are the major precipitating causes of adrenal crisis.
- **Option C:** Decreased output would be a clinical manifestation but would take longer to occur than blood pressure changes. The clinician must be able to work-up and manage patients with adrenal masses, both functional and non-functional, to treat these patients with minimal morbidity. When planning for adrenalectomy, considerations of hormonal changes and preoperative preparation for these changes is as important and demands as much of the surgeon’s attention as the technical aspects of the case.
- **Option D:** Specific gravity changes occur with other disorders. Adrenalectomy has been shown to have a relatively low risk of postoperative complications, with an overall rate of 3.6%. Improved patient outcomes and decreased hospital costs have been demonstrated when adrenalectomy is performed by a high-volume adrenal surgeon (>/=6 adrenalectomies/year).

84. A laboring client is in the first stage of labor and has progressed from 4 to 7 cm in cervical dilation. In which of the following phases of the first stage does cervical dilation occur most rapidly?

A. Preparatory phase

B. Latent phase

C. Active phase

D. Transition phase

Correct Answer: C. Active phase.

Cervical dilation occurs more rapidly during the active phase than any of the previous phases. The active phase is characterized by cervical dilation that progresses from 4 to 7 cm. The active phase of labor should occur much more rapidly, usually within 4 hours after the rupture of membranes when there are adequate uterine contractions. If the mother does not fully dilate by these average

estimations, she is said to be having an arrest of the active phase of Stage 1 labor.

- **Option A:** The preparatory, or latent, phase begins with the onset of regular uterine contractions and ends when rapid cervical dilation begins. In a primigravida, the latent phase should not exceed 20 hours. In a multigravida, the latent phase should not exceed 14 hours. If a female is in labor and exceeds these average time frames, she is said to be having a prolonged latent phase.
- **Option B:** Stage 1 subdivides into latent and active where 0 to 6 cm is the latent phase of Stage 1, and 6 cm to complete dilation of the cervix is recognized as the active phase of Stage 1 labor.
- **Option D:** Transition is defined as cervical dilation beginning at 8 cm and lasting until 10 cm or complete dilation. The third phase is called transition and is the last phase. During transition, the cervix dilates from 8 to 10 centimeters. Contractions are usually very strong, lasting 60 to 90 seconds and occurring every few minutes. Most women feel the urge to push during this phase.

85. A diabetic multigravida is scheduled for an amniocentesis at 32 weeks gestation to determine the L/S ratio and phosphatidylglycerol level. The L/S ratio is 1:1 and the presence of phosphatidylglycerol is noted. The nurse's assessment of this data is:

A. The infant is at low risk for congenital anomalies.

B. The infant is at high risk for intrauterine growth retardation.

C. The infant is at high risk for respiratory distress syndrome.

D. The infant is at high risk for birth trauma.

Correct Answer: C. The infant is at high risk for respiratory distress syndrome.

When the L/S ratio reaches 2:1, the lungs are considered to be mature. The Lecithin-to-Sphingomyelin Ratio (L/S ratio) is one of several methods for clinicians to assess fetal lung maturation. This biochemical test was first introduced in the 1970s, where a sample of amniotic fluid was collected via amniocentesis to determine the risk of the neonate developing respiratory distress syndrome (RDS). The sample was then evaluated, utilizing thin-layer chromatography to assess the size of lecithin relative to sphingomyelin.

- **Option A:** The L/S ratio does not indicate congenital anomalies. Based on new guidelines, these indications no longer warrant testing the L/S ratio or performing other fetal lung testing modalities. One possible exception relates to inaccurate dating of the gestational age. If there is poor dating of the pregnancy and the delivery is to be planned between 32 to 39 weeks gestation, the clinician may consider testing for fetal lung maturity.
- **Option B:** The infant is not at risk for intrauterine growth retardation. The main focus of testing the L/S ratio is to determine fetal lung maturity in an effort to decrease the risk of delivering a neonate with respiratory distress syndrome (RDS). RDS predominantly occurs in preterm infants less than 39 weeks gestation with increased risk with lesser gestational age.
- **Option D:** The infant will most likely be small for gestational age and will not be at risk for birth trauma. The normal L/S ratio is 2.0 to 2.5 and is significant for appropriate fetal lung development. An L/S ratio of less than 2.0 is significant for immature fetal lung development. For patients who have poorly controlled diabetes, there was a discussion for the L/S ratio to be 3.0 due to elevated maternal glucose impacting the maturity of the developing fetal lungs.

86. Isaiah, a 16-year-old high school student, presented to the school clinic complaining of a sore throat that began 2 days ago. He is worried as he has a big track meet the next day. Upon examination, the nurse found that he had a temperature of 101.8°F and enlarged, tender cervical lymph nodes. His pharynx is markedly erythematous with exudate. A Rapid Antigen Detection Test (RADT) for Group A Streptococcus is performed and comes back positive, confirming a diagnosis of streptococcal pharyngitis or "strep throat." Considering the assessment data and Isaiah's confirmed diagnosis, which of the following clinical manifestations would the nurse most likely expect?

A. A fiery red pharyngeal membrane and fever.

B. Pain over the sinus area and purulent nasal secretions.

C. Foul-smelling breath and noisy respirations.

D. Weak cough and high-pitched noise on respirations.

E. Tender, swollen anterior cervical lymph nodes.

F. Chest discomfort and a productive cough with yellow sputum.

G. Dry, scratchy throat and hoarseness lasting more than a week.

Correct Answer: A. A fiery red pharyngeal membrane and fever.
The clinical manifestations of strep throat (streptococcal pharyngitis) typically include a sore throat, painful swallowing, and fever. On examination, the pharyngeal membrane often appears red and swollen, sometimes with a "fiery" appearance. This choice represents the classical clinical presentation of strep throat, making it the most likely manifestation expected by the nurse.

- **Option B:** Pain over the sinus area and purulent nasal secretions are more indicative of sinusitis, which is an infection or inflammation of the paranasal sinuses.
- **Option C:** Foul-smelling breath and noisy respirations may be indicative of other respiratory or oropharyngeal infections but are not typically associated with strep throat.
- **Option D:** Weak cough and high-pitched noise on respirations could be associated with other respiratory conditions such as croup or a foreign body aspiration, but these symptoms are not typical of strep throat.
- **Option E:** Tender, swollen anterior cervical lymph nodes can be associated with strep throat due to the local infection and the body's immune response. However, this choice doesn't capture the quintessential manifestations of strep throat as comprehensively as Option A.
- **Option F:** Chest discomfort and a productive cough with yellow sputum are more indicative of a lower respiratory infection such as bacterial pneumonia rather than a strep throat.
- **Option G:** A dry, scratchy throat and hoarseness lasting more than a week may suggest other conditions such as viral pharyngitis, laryngitis, or even gastroesophageal reflux disease (GERD) rather than strep throat.

87. A 66-year-old postmenopausal woman is seen in the outpatient nutrition clinic for dietary counseling. She was recently diagnosed with osteoporosis after a bone density scan revealed significant reductions in her bone mineral density. The dietician, aiming to address the nutritional aspects of her condition, suggests a specific dietary modification to potentially mitigate the

progression of her bone loss. Which of the following dietary adjustments would be most appropriate for this patient's condition?

A. Imposing strict restrictions on her daily fluid consumption.

B. Significantly reducing her protein consumption.

C. Completely excluding carbohydrates from her meals.

D. Augmenting her daily dietary regimen with calcium-rich foods or supplements.

- **Options A, B, and C:** Reducing protein consumption, eliminating carbohydrates, and limiting fluid intake are not specific dietary modifications for osteoporosis management.

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

A. Restlessness, short attention span, hyperactivity.

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

C. Deterioration in social functioning, excessive anxiety, and worry, bizarre behavior.

D. Sadness, poor appetite and sleeplessness, loss of interest in activities.

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

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

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

89. A 58-year-old male patient, Mr. Smith, who has been diagnosed with moderate to severe rheumatoid arthritis (RA), presents to an outpatient rheumatology clinic. He complains of joint stiffness in the morning, especially

in his hands and wrists, and expresses difficulty in performing daily tasks such as buttoning his shirt. On physical examination, there is notable swelling, tenderness, and warmth in the metacarpophalangeal and proximal interphalangeal joints. After discussing various therapeutic options, the rheumatologist prescribes methotrexate to Mr. Smith. As the nurse in charge of providing patient education, which information regarding methotrexate is essential for Mr. Smith to understand? Select all that apply.

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

B. The need to avoid alcohol while taking methotrexate

C. The potential for increased susceptibility to infections

D. The possibility of gastrointestinal side effects

E. The importance of taking methotrexate on an empty stomach

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

- **Option A:** Methotrexate can have an impact on liver function, and regular blood tests are essential to monitor for any signs of liver toxicity. The nurse should emphasize the significance of attending these tests as scheduled to ensure the safe and effective use of the medication.
- **Option B:** Methotrexate and alcohol do not mix well. Alcohol can increase the risk of liver damage when combined with methotrexate. Therefore, patients should be informed about the importance of abstaining from alcohol during their treatment.
- **Option C:** Methotrexate can suppress the immune system, making patients more susceptible to infections. Patients need to be aware of this potential risk and should promptly report any signs of infection to their healthcare provider.
- **Option D:** Gastrointestinal side effects, such as nausea, vomiting, and diarrhea, are common with methotrexate. The nurse should inform the patient about these potential side effects and provide strategies to manage them, such as taking the medication with food or using anti-nausea medications if necessary.
- **Option E:** Methotrexate is typically taken with food to reduce the risk of gastrointestinal side effects. Taking it on an empty stomach can increase the likelihood of nausea and discomfort. Therefore, the nurse should advise the patient to take methotrexate with a meal or snack, unless otherwise directed by the prescribing physician.

90. Which of the following causes of Hyperglycaemic Hyperosmolar Non-Ketotic Syndrome (HHNS) is most common?

A. Insulin overdose

B. Removal of the adrenal gland

C. Undiagnosed, untreated hyperpituitarism

D. Undiagnosed, untreated diabetes mellitus

Correct Answer: D. Undiagnosed, untreated diabetes mellitus

Undiagnosed, untreated diabetes mellitus is one of the most common causes of HHNS. Hyperosmolar hyperglycemic syndrome (HHS) is a clinical condition that arises from a complication of diabetes

mellitus. Type 2 diabetes accounts for about 90% to 95% of diabetes cases. It is most commonly seen in patients with obesity. If diabetes mellitus is well controlled, the chance of developing HHS is minimal.

- **Option A:** Insulin overdose can cause toxicity by causing hypoglycemia and many additional effects, including arrhythmias, coma, seizures, hypotension, amongst other symptoms. Long-term insulin use may lead to dermal toxicity by causing lipodystrophy.
- **Option B:** Primary adrenal insufficiency occurs after bilateral adrenalectomy. Signs and symptoms are volume depletion, hypotension, hyponatremia, hyperkalemia, fever, abdominal pain. Other consequences of bilateral adrenalectomy include hypercortisolism due to excess ACTH stimulation of residual adrenal tissue, adrenal crisis, and the development of an aggressive corticotropic tumor called Nelson's syndrome.
- **Option C:** Hyperpituitarism can cause several different conditions. These conditions include Cushing syndrome, gigantism or acromegaly, galactorrhea or prolactinoma, and hyperthyroidism.

91. Situation: The nurse may encounter clients with concerns on sexuality. The most basic factor in the intervention with clients in the area of sexuality is:

A. Knowledge about sexuality.

B. Experience in dealing with clients with sexual problems.

C. Comfort with one's sexuality.

D. Ability to communicate effectively.

Correct Answer: C. Comfort with one's sexuality

The nurse must be accepting, empathetic and non-judgmental to patients who disclose concerns regarding sexuality. This can happen only when the nurse has reconciled and accepted her feelings and beliefs related to sexuality. Sexuality is a very personal and sensitive subject; the client is more likely to share this information if he or she does not fear being judged by the nurse.

- **Option A:** Encourage the client to discuss the disease process that may be contributing to sexual dysfunction; ensure that client is aware that alternative methods of achieving sexual satisfaction exist and can be learned through sex counseling if he or she and partner desire to do so.
- **Option B:** Identify factors that affect the client's sexuality. Note cultural, social, ethnic, racial, and religious factors that may contribute to conflicts regarding variant sexual practices.
- **Option D:** Effective communication is an important consideration, but this is not the priority. Provide positive reinforcement. Observe client behaviors and the responses he or she elicits from others; give social attention (e.g., smile, nod) to desired behaviors.

92. The nurse instructs a laboring client to use accelerated blow breathing. The client begins to complain of tingling fingers and dizziness. Which action should the nurse take?

A. Administer oxygen by face mask.

B. Notify the health care provider of the client's symptoms.

C. Have the client breathe into her cupped hands.

D. Check the client's blood pressure and fetal heart rate.

Correct Answer: C. Have the client breathe into her cupped hands.

Tingling fingers and dizziness are signs of hyperventilation (blowing off too much carbon dioxide). Hyperventilation is treated by retaining carbon dioxide. This can be facilitated by breathing into a paper bag or cupped hands.

- **Option A:** Giving oxygen is inappropriate because the carbon dioxide level is low, not the oxygen level.
- **Option B:** Before notifying the healthcare provider, the nurse may first intervene by having the client breathe into her cupped hands. If the client's situation does not improve, the nurse may notify the physician.
- **Option D:** The client's blood pressure and fetal heart rate are not related to the low levels of carbon dioxide in her body. It is due to blowing off too much carbon dioxide while using blow breathing exercises.

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

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

B. A hypotonic solution supplies an excess of sodium and chloride ions.

C. Excessive volumes are recommended in the early postoperative period.

D. A hypotonic solution is used to treat hyponatremia.

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

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

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

94. Twelve hours after being admitted for sustaining burns on 50% of their body, a patient's blood glucose level has been recorded at 90 mg/dL. Earlier in the day, the patient exhibited signs of shock and pain, but has since been stabilized with IV fluids and pain management. Given the current blood glucose reading in the context of their condition, what is the most appropriate next step for the nurse?

A. Notify the emergency team.

B. Document the finding as the only action.

C. Ask the client if anyone in her family has diabetes mellitus.

D. Slow the intravenous infusion of dextrose 5% in Ringer's lactate.

Correct Answer: B. Document the finding as the only action.

Neural and hormonal compensation to the stress of the burn injury in the emergent phase increases liver glucose production and release. An acute rise in the blood glucose level is an expected client response and is helpful in the generation of energy needed for the increased metabolism that accompanies this trauma.

- **Option A:** The glucose level is not high enough to alert the emergency team. A variety of laboratory tests will be needed within the first 24 hours of a patient's admission (some during the initial resuscitative period and others after the patient is stabilized).
- **Option C:** A family history of diabetes could make her more of a risk for the disease, but this is not a priority at this time. The secondary assessment shouldn't begin until the primary assessment is complete; resuscitative efforts are underway; and lines, tubes, and catheters are placed.
- **Option D:** Infusion of an IV fluid containing dextrose may further increase the client's blood glucose. The ideal burn resuscitation is the one that effectively restores plasma volume, with no adverse effects. Isotonic crystalloids, hypertonic solutions, and colloids have been used for this purpose, but every solution has its advantages and disadvantages. None of them is ideal, and none is superior to any of the others.

95. For Jayvin who is taking antacids, which instruction would be included in the teaching plan?

A. "Take the antacids with 8 oz of water."

B. "Avoid taking other medications within 2 hours of this one."

C. "Continue taking antacids even when pain subsides."

D. "Weigh yourself daily when taking this medication."

Correct Answer: B. "Avoid taking other medications within 2 hours of this one."

Antacids neutralize gastric acid and decrease the absorption of other medications. The client should be instructed to avoid taking other medications within 2 hours of the antacid. The antacids act by neutralizing the acid in the stomach and by inhibiting pepsin, which is a proteolytic enzyme. Each of these cationic salts has a characteristic pharmacological property that determines its clinical use.

- **Option A:** Water, which dilutes the antacid, should not be taken with an antacid. The dose for antacids depends upon the age of the patient, the purpose of administration (neutralization of acid or off-label use), and the presence of other comorbidities like renal or hepatic impairment.
- **Option C:** A histamine receptor antagonist should be taken even when the pain subsides. Calcium salts neutralize gastric acidity resulting in increased gastric and duodenal bulb pH; they additionally inhibit the proteolytic activity of pepsin if the pH is greater than 4 and increase lower esophageal sphincter tone.
- **Option D:** Daily weights are indicated if the client is taking a diuretic, not an antacid. The average therapeutic dose of antacid is 10 to 15 mL (1 tablespoon or one package content) of liquid or 1 to 2 tablets 3 to 4 times a day. Periodic monitoring of calcium and phosphorus plasma concentrations is

a suggested practice in patients on chronic therapy.

96. Katherine is a young Unit Manager of the Pediatric Ward. Most of her staff nurses are senior to her, very articulate, confident, and sometimes aggressive. Katherine feels uncomfortable believing that she is the scapegoat of everything that goes wrong in her department. Which of the following is the best action that she must take?

A. Identify the source of the conflict and understand the points of friction.

B. Disregard what she feels and continues to work independently.

C. Seek help from the Director of Nursing.

D. Quit her job and look for another employment.

Correct Answer: A. Identify the source of the conflict and understand the points of friction

This involves a problem-solving approach, which addresses the root cause of the problem. Seek to understand the underlying emotions of the employees in conflict. Employers can manage workplace conflict by creating an organizational culture designed to preclude conflict as much as possible and by dealing promptly and equitably with conflicts that employees cannot resolve among themselves.

- **Option B:** Do not ignore conflict, and do not avoid taking steps to prevent it. Unresolved issues of interpersonal tension and conflict can create emotional stress for employees, politicize the workplace and divert attention from the organization's mission.
- **Option C:** Before escalating the conflict to the Director of Nursing, the unit manager should first try to deescalate the problem. If a manager has mechanisms in place to resolve conflict at its early stages, employees will generally see their employer as fair in their dealings with them and will likely be more satisfied with their jobs.
- **Option D:** If the manager does not act, conflicts will escalate into larger problems, discrimination and harassment complaints may increase, and the employer's reputation could be damaged. When employees mistrust management or perceive the organization as acting unfairly, turnover may increase. This can lead to recruiting and training expenses for new hires and the costs attributable to slippage of performance until new employees become fully proficient in their jobs.

97. A 30-year-old male patient, recently diagnosed with type 1 diabetes, is being educated by the nurse on potential complications of diabetes, including acute hypoglycemia. The patient is keen to understand how different health conditions might interact with his diabetes. The nurse is discussing other conditions that might also predispose a patient to develop acute hypoglycemia. Which of the following conditions can also lead to acute hypoglycemia?

A. Liver disease

B. Hypertension

C. Type 2 diabetes

D. Hyperthyroidism

Correct Answer: A. Liver Disease

The client with liver disease has a decreased ability to metabolize carbohydrates because of a decreased ability to form glycogen (glycogenesis) and to form glucose from glycogen.

- **Option B:** The hemodynamic changes associated with hypoglycemia include an increase in heart rate and peripheral systolic blood pressure, a fall in the central blood pressure, reduced peripheral arterial resistance, and increased myocardial contractility, stroke volume, and cardiac output.
- **Option C:** Type 2 diabetes is an islet paracrinopathy in which the reciprocal relationship between the glucagon-secreting alpha cell and the insulin-secreting beta-cell is lost, leading to hyperglucagonemia and hence the consequent hyperglycemia.
- **Option D:** Hyperthyroidism is usually associated with poor blood glucose control and a need for additional insulin. An increased metabolism “clears” insulin from the system at a faster rate, and increased production and absorption of glucose can raise blood sugars.

98. A 45-year-old patient in the intensive care unit, who was recently involved in a severe car accident, has multiple fractures and internal injuries. The patient has a history of chronic back pain and has been on long-term opioid therapy. The patient is currently on a pump set to deliver a basal rate of 10 ml per hour of morphine plus PRN doses for breakthrough pain. The nurse also notes that the patient has been frequently pressing the PRN button for additional relief. Given this scenario, which observation indicates that the pump may not be functioning correctly?

A. The client complains of discomfort at the IV insertion site and has slight redness around the area.

B. The client states “I just can’t get relief from my pain,” even after pressing the PRN button multiple times.

C. The level of the drug is 100 ml at 8 AM and is 80 ml at noon, despite the patient's frequent requests for PRN doses.

D. The level of the drug is 100 ml at 8 AM and is 50 ml at noon.

E. The patient's respiratory rate has decreased to 8 breaths per minute.

F. The patient's blood pressure has dropped significantly since the last reading.

Correct Answer: C. The level of the drug is 100 ml at 8 AM and is 80 ml at noon

The pump is set to deliver a basal rate of 10 ml per hour. From 8 AM to noon, which is 4 hours, the pump should have delivered 40 ml (10 ml x 4 hours). If the level of the drug was 100 ml at 8 AM, it should be 60 ml at noon (100 ml – 40 ml). The fact that it’s 80 ml at noon indicates that only 20 ml has been delivered over 4 hours, suggesting the pump may not be functioning correctly, especially given the patient’s frequent requests for PRN doses.

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

A. The middle of her cycle to ensure that she is ovulating.

B. During the menstrual period.

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

D. Just before the menstrual period to determine if ovulation has occurred.

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

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

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

100. The drug/drugs used most commonly to treat peripheral or cerebral vascular obstructive disease is/are:

A. pentoxifylline (Trental)

B. cyclandelate (Cyclan)

C. isoxsuprine (Vasodilan)

D. All of the above

Correct Answer: D. All of the above

All are vasodilators used primarily to treat peripheral or cerebral vascular obstructive disease. There are different classes of vasodilators used today in the current clinical practice, and each has different actions on the coronary arteries and peripheral vasculature (arteries and veins). Vasodilators most commonly affect the arteries in the human body, but some vasodilators (such as nitroglycerin) can affect the venous system of the body predominantly.

- **Option A:** Pentoxifylline (PTXF) is a vasoactive agent that improves the flow of blood by reducing its viscosity. Pentoxifylline and its metabolites decrease blood viscosity and improve the blood flow and peripheral tissue oxygenation.
- **Option B:** Cyclandelate belongs to the group of medicines commonly called vasodilators. These medicines increase the size of blood vessels. Cyclandelate is used to treat problems resulting from poor blood circulation.
- **Option C:** Isoxsuprine (Vasodilan) is a beta-adrenergic that directly affects the vascular smooth muscle and results in peripheral vascular dilation. Isoxsuprine relaxes the uterine smooth muscles and is used for the treatment of pre-term labor and dysmenorrhea.