Detailed Answer Key
N433 Exam 4 Practice Questions

1. **For each client finding, click to specify if the finding is consistent with sickle cell disease, iron deficiency anemia, or leukemia. Each finding may support more than 1 disease process.**

   Answers cannot be displayed for this alternate item format.

   Rationale: **Ankle ulcer is consistent with sickle cell disease.** In sickle cell disease, decreased perfusion can result in ulcers of the lower extremities.**Respiratory status is consistent with sickle cell disease, iron deficiency anemia, and leukemia.** In sickle cell disease, iron deficiency anemia, and leukemia, dyspnea occurs to compensate for decreased hematocrit and hemoglobin.**Joint pain is consistent with sickle cell disease and leukemia.** In sickle cell disease and leukemia, impaired function of the bone marrow can result in joint pain and swelling.**Heart rate at 1000 is consistent with sickle cell disease, iron deficiency anemia, and leukemia.** In sickle cell disease, iron deficiency anemia, and leukemia, heart rate increases to increase perfusion to the tissues and to compensate for a decreased hematocrit and hemoglobin.**Jaundice is consistent with sickle cell disease.** In sickle cell disease, jaundice can occur due to destruction of red blood cells and the release of bilirubin.

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2. A nurse is caring for a 17-year-old client who is experiencing a relapse of leukemia and is refusing treatment. The client's mother insists that the client receive treatment. Which of the following actions should the nurse take?

   A. Initiate the IV per the parent's request.

      Rationale: Starting the IV could be construed as battery, which is nonconsensual touching of a client.

   B. Notify the provider of the situation.

      Rationale: The nurse should consult with the provider before proceeding. Although the parent must give consent for a minor, the nurse should obtain the minor's assent when the minor is able to give it.

   C. Administer a sedative to calm the client.

      Rationale: This action violates the client's right to participate in care and does not focus on the client's need to verbalize concerns.

   D. Offer the client an antiemetic.

      Rationale: There is no data that indicates this is a concern of the client. This intervention is unnecessary.

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3. A nurse is planning care for a client who has leukemia and a platelet count of 130,000/mm3. Which of the following interventions should the nurse include in the plan of care?

   A. Check the IV site for bleeding every 8 hr.

      Rationale: The nurse should check the client's IV site for bleeding every 4 hr.

   B. Limit IM injections.

      Rationale: The nurse should plan to limit IM injections or venipunctures to prevent harm to the client. If venipuncture is necessary, the nurse should hold pressure to the site for 10 min afterward.

C. Obtain a rectal temperature every 8 hr.

Rationale: The nurse should avoid procedures which could traumatize the rectal tissues and cause bleeding.

D. Check the client for proteinuria.

Rationale: The nurse should check the client's urine and stool for blood.

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4. A nurse is creating a plan of care for a child who has sickle cell anemia. Which of the following interventions should the nurse include in the plan?

A. Discourage a high level of fluid intake.

Rationale: The nurse should encourage a high level of fluid intake.

B. Apply cold compresses to painful, swollen joints.

Rationale: The nurse should apply heat to painful areas. Cold therapy promotes vasoconstriction and sickling.

C. Observe for indications of hypokalemia.

Rationale: The nurse should observe the child for indications of hypokalemia. Diuresis can result in electrolyte loss, leading to hypokalemia.

D. Administer meperidine every 4 hr for pain.

Rationale: Meperidine is not recommended for children who have sickle cell anemia because of the increased risk for seizure activity.

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5. The nurse is providing care for an adolescent who just gave birth to a neonate. The mother tests positive for HIV; however, the mother did not receive prenatal care. Based on the nurse's understanding about HIV/AIDS, which interventions does the nurse expect? **Select all that apply.**

Answers cannot be displayed for this alternate item format.

Rationale: Feedback**Selection 1: This is incorrect.** Neonates born to HIV-positive mothers are not routinely placed in foster care. The scenario does not present enough information to determine deficient parenteral care of the neonate. **Selection 2: This is correct.** HIV PCR is used for detection in infants born to HIV-infected mothers because of the presence of maternal antibodies transferred transplacentally; preferred virological assays include HIV DNA PCR and HIV RNA assays. **Selection 3: This is correct.** Virological diagnostic testing is recommended at birth in infants at high risk for HIV infection (e.g., infants born to HIV-infected mothers who did not receive prenatal care or prenatal antiretroviral therapy).**Selection 4: This is incorrect.** Immediate immunization is not recommended; however, immunization against common childhood illnesses is strongly recommended if exposed to HIV. The immunizations will be given when age appropriate. **Selection 5: This is correct.** The nurse will expect initiation of nutritional management that includes high-calorie, nutrient-dense foods.

6. The nurse is providing care for a 9-year-old child who has developed iron-deficiency anemia as a result of hemodialysis. Which prescribed order does the nurse expect?

A. Ferric gluconate 1.5 mg/kg/dose for 8 doses

Rationale: This is correct. Ferric gluconate is indicated for iron deficiency associated with hemodialysis.

B. Ferrous fumarate 4 to 6 mg/kg/day

Rationale: This is incorrect. Ferrous fumarate is indicated for the treatment of severe iron-deficiency anemia.

C. Iron dextran 50 mg/day

Rationale: This is incorrect. Iron dextran is indicated for the treatment of iron deficiency when oral iron therapy is unsatisfactory.

D. Iron sucrose 100 mg/day

Rationale: This is incorrect. Iron sucrose is indicated for the treatment of iron deficiency in adults with chronic renal failure.

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7. The nurse is preparing teaching materials for parents with children diagnosed with anemia. Which information will be marked as being specifically for the child diagnosed with sickle cell disease?

A. Follow a balanced nutritious diet.

Rationale: This is incorrect. The nurse recommends a balanced nutritious diet for all children, especially those with anemias.

B. Encourage optimal oral hydration.

Rationale: This is correct. The child with sickle cell disease is encouraged to stay hydrated to help avoid the clumping of sickled cells. Hydration can be accomplished with IV therapy and oral fluids. Children with iron-deficiency anemia need a normal daily fluid intake.

C. Allow low-energy activities and rest periods.

Rationale: This is incorrect. Anemias can cause fatigue; children should participate in low-level activities, as able. Caretakers will need to provide for adequate rest periods.

D. Make sure that immunizations are up to date.

Rationale: This is incorrect. Anemias put children at risk for infections; immunizations need to be up to date. Influenza and pneumonia vaccines are strongly recommended.

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8. A school-age patient with rubella is placed in droplet precautions. Which action should the nurse take when implementing these precautions?

A. Use a mask with a high-efficiency particulate air (HEPA) filter.

Rationale: This is incorrect. A mask with a HEPA filter is needed when caring for a patient with tuberculosis.

B. Instruct to cough into the hands.

Rationale: This is incorrect. The patient should be instructed to cover the mouth with a tissue when coughing, properly dispose of the used tissue, and wash the hands.

C. Wear a mask when providing care.

Rationale: This is correct. For droplet precautions, health-care providers should wear a mask.

D. Assign to a negative air pressure room.

Rationale: This is incorrect. A negative air pressure room is needed for the patient with tuberculosis.

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9. A 3-year-old toddler is being seen for unexplained, excessive bleeding. The health-care provider suspects the child has hemophilia. Which diagnostic test does the nurse anticipate to confirm the diagnosis?

A. Platelet count

Rationale: This is incorrect. Platelet count is normal in hemophilia and is therefore not a diagnostic test that the nurse would expect to be ordered.

B. Partial thromboplastin time (PTT)

Rationale: This is correct. A PTT test is ordered in cases of suspected hemophilia. The PTT is prolonged, indicating ineffective clotting factors except factor VII.

C. Bone marrow aspiration

Rationale: This is incorrect. Bone marrow aspiration is not a diagnostic test ordered for possible hemophilia.

D. Erythrocyte sedimentation rate (ESR)

Rationale: This is incorrect. The erythrocyte sedimentation rate is used to detect inflammation. This test is not used to confirm a diagnosis of hemophilia.

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10. The nurse is providing patient teaching for a school-age patient and parents. Chemotherapy is prescribed for cancer treatment. Before the first dose is administered on an outpatient basis, which teaching is **most** important for the nurse to provide?

A. Prompt recognition of adverse effects after the therapy.

Rationale: This is correct. It is most important for the patient and family to recognize adverse effects to the chemotherapy and seek medical assistance as directed.

B. Explain how to immediately initiate protective precautions.

Rationale:

This is incorrect. Protective precautions are explained only as needed.

C. Promote nutrition with the preparation of favorite foods.

Rationale: This is incorrect. Promoting the preparation of the patient's favorite food may or may not be necessary. Some favorite foods can be available after the first treatment if needed or desired.

D. Have icy drinks available to improve oral fluid intake.

Rationale: This is incorrect. During chemotherapy, patients may experience mouth sores and have difficulty eating and drinking. Some patients like cold liquids, and others prefer warm liquids. It is unlikely that this is an issue after the first chemotherapy treatment.

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11. The parents of a 4-year-old toddler bring the child to the pediatrician because a lump is found in the toddler's waist area. Diagnostic testing verifies the toddler has a Wilms' tumor on the right kidney. The toddler is to be sent home until scheduled surgery. Which teaching is essential for the parents regarding preoperative care?

A. Promote hydration by increasing fluid intake.

Rationale: This is incorrect. The parents need to provide the toddler with a balanced and healthy diet. There is no reason to expect dehydration or to increase fluids.

B. Maintain a side position with pillows for sleeping.

Rationale: This is incorrect. There is no identifiable benefit to keeping the toddler in a side-lying position with pillow placement during sleep; keeping a 4-year-old toddler in one position may be challenging.

C. Avoid palpating the tumor and pushing or lifting in the area.

Rationale: This is correct. Do not palpate the tumor, because this can cause the proliferation or spread of cancer cells. Avoid pushing or lifting in tumor area when handling and bathing the child. This is essential teaching before surgery.

D. Provide information about postoperative care.

Rationale: This is incorrect. The nurse will provide information about the toddler's postoperative care; however, this is not the essential teaching before surgery.

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12. A parent brings a 2-month-old baby in for a routine wellness examination. Which vaccination should the nurse prepare to administer to this patient?

A. Hepatitis A (Hep A)

Rationale: This is incorrect. The hepatitis A vaccine is given to all children 12 months and older.

B. Hepatitis B (Hep B)

Rationale: This is correct. The hepatitis B vaccine is provided to all newborns. Three doses of hepatitis B are given before age 2 years: at birth, at 1 to 2 months of age, and at 9 to 12 months of age.

C. Inactivated poliovirus (IPV)

Rationale: This is incorrect. The IPV is given in a series of four doses: at 2, 4, and 6 to 18 months as well as 4 to 6 years.

D. Measles, mumps, rubella (MMR)

Rationale: This is incorrect. The minimum age for receiving the measles, mumps, and rubella immunization is 12 months.

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13. An adolescent develops a fever, cough, and a maculopapular rash. Which question should the nurse ask when completing the health history with this patient?

A. “Did you receive any vaccinations recently?”

Rationale: This is incorrect. Receiving a vaccination does not cause the symptoms of a fever, cough, and maculopapular rash.

B. “Do you usually eat cold pizza left on the counter overnight?”

Rationale: This is incorrect. Foodborne viruses do not cause a cough, fever, or maculopapular rash.

C. “Do you forget to wash your hands after using the bathroom?”

Rationale: This is incorrect. Infections transmitted through the fecal-oral route do not cause a fever, cough, and maculopapular rash.

D. “Have you been around anyone with a cold over the last 3 weeks?”

Rationale: This is correct. Foodborne viruses manifest with gastrointestinal distress. Chickenpox is a respiratory-borne viral disease with an incubation period of about 21 days.

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14. A nurse is caring for a school-age child who has inflammation of the right eye. Which finding, if present, would indicate to the nurse that the child has bacterial conjunctivitis rather than viral conjunctivitis?

A. Eye swelling

Rationale: This is incorrect. Eye swelling or edema occurs with both bacterial and viral conjunctivitis.

B. Red conjunctiva

Rationale: This is incorrect. Pink or red conjunctiva occurs in both bacterial and viral conjunctivitis.

C. Watery discharge

Rationale: This is incorrect. Viral conjunctivitis causes a watery discharge from the effected eye.

D. Purulent drainage

Rationale: This is correct. Purulent drainage is a symptom of bacterial conjunctivitis.

15. A 17-year-old patient with influenza tells the nurse, “I can’t believe I got sick. I’ve been taking vitamin C, vitamin D, echinacea, and some other herbal remedies to boost my immune system.” Which should the nurse say in response to this patient? **Select all that apply.**

    Answers cannot be displayed for this alternate item format.

    Rationale: Feedback1.This is incorrect. Additional research is needed regarding alternative supplements to identify safety and efficacy of these therapies.2.This is incorrect. The vitamins and supplements listed are ones that people commonly take for disease prevention. However, that does not mean they have been proved effective or safe. 3.This is correct. The safety of supplements and herbs have not been determined and need additional study. 4.This is incorrect. There is no evidence that taking vitamins and herbs concurrently reduces the effectiveness of herbs. 5.This is correct. The effectiveness of supplements and herbs for a specific health problem has not been determined and needs additional study.

16. A community health nurse in a pediatric clinic is reviewing the history of a 12-year-old client. Which of the following immunizations should the nurse expect to administer?

    A. Meningococcal conjugate

    Rationale: The CDC recommends administering the meningococcal vaccine to children who are 11 through 12 years old and then giving a booster dose at age 16. The nurse should prepare to administer this immunization.

    B. Herpes zoster

    Rationale: The nurse should plan to administer a single dose of herpes zoster vaccine to an adult client 60 years old or older.

    C. Rotavirus

    Rationale: The CDC recommends administering rotavirus vaccine during a child’s first year of life.

    F. Pneumococcal polysaccharide

    Rationale: The nurse should plan to administer the pneumococcal polysaccharide vaccine only when a child over 2 years old has a specific medical indication that puts him at high risk for this infection.

17. A nurse is admitting a toddler who has respiratory syncytial virus (RSV). Which of the following actions should the nurse take?

    A. Initiate airborne precautions.

    Rationale: The nurse should initiate contact precautions for a toddler who has RSV because the toddler can transmit the disease to others who come in contact with body fluids or contaminated items in the environment.

    B. Keep thermometer in the toddler's room.

    Rationale:

The nurse should keep and use dedicated equipment, such as blood pressure monitor, stethoscope, and thermometer in the client's room to prevent the spread of infection from client to client.

C. Allow the toddler to play in the common room.

Rationale: The nurse should minimize the client's movement outside of the room to prevent possible contamination of other children.

D. Place the toddler in a room that has negative air pressure.

Rationale: The nurse should place clients who have an illness that can be transmitted by airborne droplets nuclei smaller than 5 microns, such as rubella and varicella, in a negative air pressure room.

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18. **Complete the following sentence by using the list of options.**

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Rationale: **Dropdown 1Scarlet fever is incorrect.** The nurse should recognize that scarlet fever is a type of group A streptococcal infection, which involves a sore throat and a red, rough-feeling rash. **Acute streptococcal infection is incorrect.** The nurse should recognize that acute streptococcal pharyngitis is a group A β-hemolytic streptococci that involves pain, redness, inflammation of the throat. **Respiratory syncytial virus is correct.** The nurse should recognize that respiratory syncytial virus is a viral infection of the respiratory system. As the illness progresses, the client may develop infections of the lower airway, such as bronchiolitis and pneumonia. **Dropdown 2 Retractions are correct.** The nurse should recognize that clients who have respiratory syncytial virus can develop retractions when the lower airway becomes affected and the effort to breathe becomes difficult. **Bradypnea is incorrect.** The nurse should recognize that clients who have respiratory syncytial virus develop tachypnea, an increased rate of breathing, as the illness progresses. Bradypnea, a decreased rate of breathing is not a finding associated with RSV. **Hyperactivity is incorrect.** The nurse should recognize that clients who have respiratory syncytial virus will experience lethargy and listlessness. Hyperactivity is not a finding associated with RSV.

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19. An infection control nurse is teaching a class about transmission of infectious agents. The nurse should include that which of the following diseases is transmitted via airborne transmission?

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Rationale: **Varicella is correct.** Varicella is spread via airborne transmission. Clients who have a varicella infection require a private room with a negative pressure airflow.**Clostridium difficile is incorrect.** Clostridium difficile is transmitted via contact with contaminated body fluids or surfaces. Clients who have a Clostridium difficile infection require a private room or a room with a client who has the same or similar diagnosis. Gloves and gowns should be worn when caring for the client who has Clostridium difficile.**Rubeola is correct.** Rubeola is spread via airborne transmission. Clients who have a rubeola infection require a private room with a negative pressure airflow. **Staphylococcus aureus is incorrect.** Staphylococcus aureus is transmitted via contact with contaminated body fluids or surfaces. Clients who have a Staphylococcus aureus infection require a private room or a room with a client who has the same or similar diagnosis. Gloves and gowns should be worn when caring for the client who has Staphylococcus aureus.**Tuberculosis is correct.** Tuberculosis is spread via airborne transmission. Clients who have a tuberculosis infection require a private room with a negative pressure airflow.

20. Which of the following assessment findings should the nurse report to the provider? **Select the 6 findings that should be reported to the provider.**

Answers cannot be displayed for this alternate item format.

Rationale: **Upper respiratory infection is correct.** Having an upper respiratory infection or other minor infection that does not completely go away after a couple of months should be reported to the provider. A persistent minor infection can be a manifestation of leukemia.**Skin assessment is correct.** The child has bruising with no known cause and a history of leukemia. Bruising and bleeding are general manifestations of leukemia, but they could also be signs of other illnesses; therefore, the nurse should report this finding to the provider. Pale skin and petechiae are also manifestations of leukemia that could indicate a reoccurrence; therefore, the nurse should report these findings to the provider.**Breath sounds is incorrect.** The child's breath sounds are clear, which is an expected finding; therefore, this finding does not need to be reported to the provider. **Oxygen saturation is correct.** The child's oxygen saturation of 92% on room air is below the expected reference range; therefore, the nurse should report this finding to the provider. **WBC count is correct**. The child's WBC count is above the expected reference range and should be reported to the provider.**Retractions are correct.** Retractions indicate an increased work of breathing related to an alteration in the ability of the child to expand their lungs. This is an unexpected finding and should be reported to the provider.**Respiratory rate is correct.** The child's respiratory rate of 30/min is above the expected reference range and could be an indicator of respiratory distress; therefore, the nurse should report this finding to the provider.**Hemoglobin is incorrect.** The child's hemoglobin level of 10 g/dL is within the expected reference range; therefore, this finding does not need to be reported to the provider.