Module Report

Tutorial: **Real Life RN Nursing Care of Children 3.0**

Module: **Type 1 Diabetes Mellitus**

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Institution: **Lakeview CON**

Program Type: **BSN**

Standard Use Time and Score

	Date/Time	Time Use	Score
Type 1 Diabetes Mellitus	9/19/2023 9:20:32 PM	43 min	Satisfactory

Reasoning Scenario Details
Type 1 Diabetes Mellitus - Use on 9/19/2023 8:37:58 PM

Reasoning Scenario Performance Related to Outcomes:

*See Score Explanation and Interpretation below for additional details.

Body Function	Strong	Satisfactory	Needs Improvement
Cognition and Sensation	100%		
Integument	100%		
Regulation and Metabolism	85.7%		14.3%

NCLEX RN	Strong	Satisfactory	Needs Improvement
RN Psychosocial Integrity	100%		
RN Basic Care and Comfort	100%		
RN Pharmacological and Parenteral Therapies	100%		
RN Reduction of Risk Potential	85.7%		14.3%
RN Physiological Adaptation	50%		50%

QSEN	Strong	Satisfactory	Needs Improvement
Safety	100%		

Patient-Centered Care	100%		
Evidence Based Practice	71.4%		28.6%

Decision Log:

Scenario	Nurse Tammy is further assessing Derek for manifestations of diabetes mellitus.
Question	Nurse Tammy is assessing Derek for other manifestations of diabetes mellitus. For which of the following manifestations should Nurse Tammy assess? (Select all that apply.)
Selected Ordering	Blurred visionIncreased thirstExcessive hungerBruises easilySlow wound healing
Rationale	Slow wound healing is correct. Slow wound healing is a common manifestation of type 1 diabetes that is caused by impaired circulation.

Optimal Decision	
Scenario	Nurse Tammy is preparing to review the results of the urine dipstick.
Question	Nurse Tammy is preparing to review the results of Derek's urine dipstick. Which of the following results should Nurse Tammy expect as an indication of diabetes mellitus?
Selected Option	Positive ketones
Rationale	Nurse Tammy should identify that positive ketones are a manifestation of diabetes mellitus. Fatty acids are used as an energy source due to the client's inability to transfer glucose into the cells. These fatty acids are then present in the urine as ketones.

Scenario	Nurse Tammy performs a fingerstick.
Question	Nurse Tammy is preparing to perform a fingerstick to check Derek's blood glucose level. Identify the order in which Nurse Tammy should perform the following steps. (Reorder the steps by dragging them into the desired sequence.)
Selected Ordering	Turn on the glucose meter.Cleanse the puncture site with an alcohol swab.Apply drop of blood to test strip.Puncture the skin with a lancet device.Apply gentle pressure to the puncture site with gauze.Lightly squeeze the puncture site.
Rationale	The first step Nurse Tammy should take when performing a fingerstick is to turn on the glucose meter to ensure the meter is working and if calibration is needed prior to use. The next step is to cleanse the puncture site with an alcohol swab to decrease the risk for infection. Once the alcohol has dried, Nurse Tammy should then puncture the skin with a lancet device. The next step Nurse Tammy should take is to lightly squeeze the puncture site to obtain a large drop of blood. The blood should then be applied to the test strip. The final step is to apply gentle pressure to the puncture site with gauze to prevent further bleeding.

Optimal Decision

Scenario	Nurse Chris determines insulin dosage.
Question	Nurse Chris is determining the insulin dosage to administer to Derek. Prescribed is insulin 0.4 units/kg/day subcutaneous in four divided doses. Derek weighs 88 lb. Which of the following dosages should Nurse Chris plan to administer?
Selected Option	4 units
Rationale	A dosage of 4 units per dose is correct. Nurse Chris should determine that Derek weighs 40 kg. Based on the prescription this equals a total dosage of 16 units/day. Nurse Chris should then divide the total daily dosage equally into four doses and should plan to administer 4 units of insulin per dose.

Optimal Decision	
Scenario	Nurse Chris is teaching about hemoglobin A1c.
Question	Nurse Chris is teaching Deborah and Derek about the hemoglobin A1c. Which of the following statements by Deborah indicates an understanding of the teaching?
Selected Option	"If Derek's A1c is 7%, it means his blood sugar is well controlled."
Rationale	Nurse Chris should confirm that a HbA1c level of < 8% indicates good glycemic control in a school-age child.

Optimal Decision	
Scenario	Nurse Chris provides Derek with a snack.
Question	Nurse Chris is selecting a snack for Derek. Which of the following snacks should Nurse Chris choose?
Selected Option	Six whole grain crackers with 2 oz mild cheddar cheese
Rationale	Nurse Chris should offer Derek a snack that provides about 15 grams of carbohydrates balanced with protein, fat, and fiber. Crackers with cheese meets Derek's nutritional needs while helping to maintain a consistent blood glucose level.

Optimal Decision	
Scenario	Nurse Chris teaches Deborah about fasting blood glucose test.
Question	Nurse Chris is teaching Deborah about a fasting blood glucose test. Which of the following statements indicates Deborah's understanding of the teaching?
Selected Option	"Derek's fasting blood sugar level is expected to be between 70 to 110."
Rationale	Nurse Chris should confirm that Deborah's statement is correct. Derek's fasting blood glucose level is expected to be between 70 to 110 mg/dL.

Optimal Decision	
Scenario	Nurse Chris responds to Derek's hypoglycemia.
Question	Nurse Chris is responding to Deborah's report that Derek is tearful, irritable, and not acting like himself. Nurse Chris observes that Derek is diaphoretic. Which of the following actions should Nurse Chris take?

Selected Option	Give 4 oz orange juice.
Rationale	Nurse Chris should identify that Derek is exhibiting manifestations of hypoglycemia. Nurse Chris should check Derek's blood glucose level and give him 10 to 15 grams of simple carbohydrate, such as 4 oz of orange juice, to increase his blood glucose level. She should then recheck his blood glucose level in 15 minutes.

Optimal Decision	
Scenario	Nurse Chris is teaching about insulin onset and peak times.
Question	Nurse Chris is teaching Deborah and Derek about insulin onset and peak times. Which of the following statements by Deborah indicates an understanding of the teaching?
Selected Option	"Regular insulin starts working within thirty minutes after injection."
Rationale	Nurse Chris should confirm that regular insulin begins working within 30 minutes following subcutaneous injection. Therefore, Derek will be at an increased risk for hypoglycemia at this time.

Optimal Decision	
Scenario	Nurse Chris is teaching about insulin injections/sites.
Question	Nurse Chris is teaching Derek and Deborah about injection site rotation and insulin injection techniques. Which of the following statements by Derek indicates an understanding of the teaching?
Selected Option	"I should inject the insulin straight in at a ninety-degree angle."
Rationale	Nurse Chris should confirm that Derek should inject the insulin at a ninety-degree angle into subcutaneous tissue.

Optimal Decision	
Scenario	Nurse Chris is teaching about insulin pens.
Question	Nurse Chris is teaching Deborah and Derek about insulin pens. Which of the following statements by Deborah indicates an understanding of the teaching?
Selected Option	"Derek should store the pen at room temperature once it's been opened."
Rationale	Nurse Chris should confirm that an insulin pen that has been opened should be stored at room temperature and not refrigerated. Insulin should be given at room temperature to prevent subcutaneous tissue atrophy.

Optimal Decision	
Scenario	Nurse Chris is teaching Derek and Deborah about insulin pumps.
Question	Nurse Chris is teaching Derek and Deborah about insulin pumps. Which of the following statements by Derek indicates an understanding of the teaching?
Selected Option	"I would need to change the insulin pump needle about every two days."
Rationale	Nurse Chris should confirm that Derek would need to change the insulin pump needle and catheter approximately every two days to decrease the risk for infection.

Optimal Decision	
Scenario	Nurse Chris is teaching Derek and Deborah about sick days.
Question	Nurse Chris is teaching Derek and Deborah about diabetes management during illness. Which of the following statements by Deborah indicates an understanding of the teaching?
Selected Option	"Derek should check his blood glucose level every 3 hours when he's sick."
Rationale	Nurse Chris should confirm that Derek should check his blood glucose level every 3 hours during an illness. Insulin dosages are determined based on blood glucose levels.

Optimal Decision	
Scenario	Nurse Chris is teaching Derek and Deborah about exercise.
Question	Nurse Chris is teaching Derek and Deborah about exercise and diabetes management. Which of the following statements by Derek indicates an understanding of the teaching?
Selected Option	"I should eat a complex carbohydrate snack before I exercise."
Rationale	Nurse Chris should confirm that Derek should consume a carbohydrate snack before exercise to decrease the risk of hypoglycemia. Derek should have an additional snack during prolonged episodes of exercise.

Optimal Decision	
Scenario	Nurse Tammy uses therapeutic communication with Derek.
Question	Nurse Tammy is addressing Derek's concern about his peers making fun of him because he has to check his blood glucose level. Which of the following responses should Nurse Tammy make?
Selected Option	"Sometimes a person who has diabetes feels embarrassed when they have to check their blood sugar in front of others. Have you ever felt that way?"
Rationale	Nurse Tammy should use therapeutic communication techniques to encourage Derek to explore and share his feelings about diabetes management. Using a third-person technique is often less threatening to children, which encourages further communication.

Optimal Decision	
Scenario	Nurse Tammy is teaching Derek about atraumatic finger sticks.
Question	Nurse Tammy is addressing Derek's concerns about fingersticks. Which of the following information should Nurse Tammy include in the teaching?
Selected Option	Use a cotton ball to wipe away the first drop of blood from the puncture site.
Rationale	Nurse Tammy should instruct Derek to wipe away the first drop of blood following the puncture. Derek should use the next drop of blood to test his blood glucose level. While this information is correct to include in the teaching, it would be better for Nurse Tammy to address Derek's concern about pain from finger sticks.

Individual Report – Score Explanation and Interpretation

Reasoning Scenario Information:

Reasoning Scenario Information provides the date, time and duration of use, along with the score earned for each attempt. A Reasoning Scenario Performance score of Strong, Satisfactory, or Needs Improvement is provided for each attempt. This information is also provided for the Optimal Decision Mode if it has been enabled.

Reasoning Scenario Performance Scores:

Strong	Exhibits optimal reasoning that results in positive outcomes in the care of clients and resolution of problems.
Satisfactory	Exhibits reasoning that results in mildly helpful or neutral outcomes in the care of clients and resolution of problems.
Needs Improvement	Exhibits reasoning that results in harmful or detrimental outcomes in the care of clients and resolution of problems.

Reasoning Scenario Performance Related to Outcomes:

A clinical reasoning performance score related to each outcome is provided. Outcomes associated with student responses are listed in the report. The number across from each outcome indicates the percentage of responses associated with the level of performance of that outcome.

NCLEX® Client Need Categories:

Management of Care	Providing integrated, cost-effective care to clients by coordinating, supervising, and/or collaborating with members of the multi-disciplinary health care team.
Safety and Infection Control	Incorporating preventative safety measures in the provision of client care that provides for the health and well-being of clients, significant others, and members of the health care team.
Health Promotion and Maintenance	Providing and directing nursing care that encourages prevention and early detection of illness, as well as the promotion of health.
Psychosocial Integrity	Promoting mental, emotional, and social well-being of clients and significant others through the provision of nursing care.
Basic Care and Comfort	Promoting comfort while helping clients perform activities of daily living.
Pharmacological and Parenteral Therapies	Providing and directing administration of medication, including parenteral therapy.
Reduction of Risk Potential	Providing nursing care that decreases the risk of clients developing health-related complications.

Physiological Adaptation	Providing and directing nursing care for clients experiencing physical illness.

Quality and Safety Education for Nurses (QSEN)

Safety	The minimization of risk factors that could cause injury or harm while promoting quality care and maintaining a secure environment for clients, self, and others.
Patient-Centered Care	The provision of caring and compassionate, culturally sensitive care that is based on a client's physiological, psychological, sociological, spiritual, and cultural needs, preferences, and values
Evidence Based Practice	The use of current knowledge from research and other credible sources, upon which clinical judgment and client care are based.
Informatics	The use of information technology as a communication and information gathering tool that supports clinical decision making and scientifically based nursing practice.
Quality Improvement	Care related and organizational processes that involve the development and implementation of a plan to improve health care services and better meet the needs of clients.
Teamwork and Collaboration	The delivery of client care in partnership with multidisciplinary members of the health care team, to achieve continuity of care and positive client outcomes.

Body Function

Cardiac Output and Tissue Perfusion	The anatomical structures (heart, blood vessels, and blood) and body functions that support adequate cardiac output and perfusion of body tissues.
Cognition and Sensation	The anatomical structures (brain, central and peripheral nervous systems, eyes and ears) and body functions that support perception, interpretation, and response to internal and external stimuli.
Excretion	The anatomical structures (kidney, ureters, and bladder) and body functions that support filtration and excretion of liquid wastes, regulate fluid and electrolyte and acid-base balance.
Immunity	The anatomic structures (spleen, thymus, bone marrow, and lymphatic system) and body functions related to inflammation, immunity, and cell growth.
Ingestion, Digestion, Absorption and Elimination	The anatomical structures (mouth, esophagus, stomach, gall bladder, liver, small and large bowel, and rectum) and body functions that support ingestion, digestion, and absorption of food and elimination of solid wastes from the body.
Integument	The anatomical structures (skin, hair, and nails) and body functions related to protecting the inner organs from the external environment and injury.
Mobility	The anatomical structures (bones, joints, and muscles) and body functions that support the body and provide its movement.

Oxygenation	The anatomical structures (nose, pharynx, larynx, trachea, and lungs) and body functions that support adequate oxygenation of tissues and removal of carbon dioxide.
Regulation and Metabolism	The anatomical structures (pituitary, thyroid, parathyroid, pancreas, and adrenal glands) and body functions that regulate the body's internal environment.
Reproduction	The anatomical structures (breasts, ovaries, fallopian tubes, uterus, vagina, vulva, testicles, prostate, scrotum, and penis) and body functions that support reproductive functions.

Decision Log

Information related to each question answered in a scenario attempt is listed in the report. A brief description of the scenario, question, selected option and rationale for that option are provided for each question answered. The words "Optimal Decision" appear next to the question when the most optimal option was selected.

The rationale for each selected option may be used to guide remediation. A variety of learning resources may be used in the review process, including related ATI Review Modules.