ATI Real Life Student Packet
N201 Nursing Care of Special Populations
2022

Student Name: ____Julia Jordan_____

ATI Scenario: ___PED 2 - Type 1 Diabetes Mellitus_____

To Be Completed Before the Simulation

****** Blue boxes should be completed using textbook information. What do you expect to find? This information should be collected before you start the ATI simulation.

Medical Diagnosis: __Diabetes Mellitus_____

NCLEX IV *(8)*: Physiological Integrity/Physiological Adaptation

Anatomy and Physiology
Normal Structures

Pancreas
- Located posterior to the bottom of the stomach
- Long/slender organ, exocrine gland
- Secretes digestive enzymes

Pancreatic Islet Cells
- Secrete insulin, somatostatin, glucagon, pancreatic polypeptide

Exocrine Function
- Involves the secretion of insulin that is produced by the body's beta cells. Glucagon is produced by the body's alpha cells. The use of both of these is what regulates the metabolism of glucose

Insulin
- Is released in response to high blood glucose levels. It enhances glucose uptake & utilization by target cells and storage of excess glucose as glycogen for later use

Glucagon
- Stimulates mechanisms that increase blood glucose levels (catabolism of glycogen to glucose)

Negative Feedback Loop/Blood Sugar Control
- After a meal is eaten, the small intestine absorbs glucose from digested foods & blood sugar rises. This stimulates beta cells in the pancreas to make insulin. Insulin targets cells (liver, fat, & muscle) to absorb the glucose & store it there. As the glucose is absorbed by the cells, the blood sugar levels begin to decrease. As the glucose levels begin to fall low, there is no longer a need for insulin to be produced so the pancreas stops releasing it.

NCLEX IV *(7)*: Reduction of Risk

Pathophysiology of Disease

Type 1
- The pancreas does not make insulin
- Occurs when beta calls of the pancreas are destroyed by immune-mediated process which leads to a complete lack of insulin

Type 2
- Insulin resistance, is more common
- The pancreas makes insulin, but body tissues do not respond to normal insulin levels
- Obesity and not exercising will put you at an increased risk for developing

There is a dysfunction of insulin production & secretion, and a dysfunction of target cells responsiveness to insulin

Too much glucose in the body draws water into urine which causes polyuria/ketonuria, then dehydration, polydipsia, and polyphagia from the cells inability to access glucose in the blood

Over time, persistently high blood glucose levels can injure tissues throughout the body
- Damage to blood vessels & nerves is see when the linings of the arteries become inflamed which can lead to atherosclerosis and put people at an increased risk for myocardial infarction & stroke
- Microscopic blood vessels of the kidneys can be damaged which can cause kidney injury & even kidney failure
- Injury to blood vessels in the can cause vision problems
- Decreased circulation to limbs & decreased sensation in the extremities from damage to the nerves can cause neuropathy, increased risk for infection, tissue injury, risk for injury, & a higher rate of amputation in lower extremities, toes, & feet

Uncontrolled diabetes can lead to ketoacidosis, deprived of glucose, cells increasingly rely on the body's fat stores for fuel… lack of glucose, the liver must use alternate lipid metabolism pathway, which increases production of ketones (aka acidic)

The buildup of ketoacidosis which can lead to a diabetic coma

Anticipated Patient Problems, Goals, & Interventions Based on Medical Diagnosis

** This worksheet should be completed before you begin the ATI simulation.

Problem #1: Risk for unstable blood glucose levels

Patient Goals:

1. PT's blood glucose levels will remain between 70 to 130 during my time of care.

2. PT will identify complex carbohydrates to include at mealtimes during my time of care.

Assessments:

- Assess blood glucose levels ACHS & PRN. Assess s/s of hyperglycemia (polydipsia, polyphagia, poly uria) q 4 hr, PRN. Assess for s/s of hypoglycemia (tremors, slurred speech, diaphoresis, HA, hunger & visual changes) q 4 hr, PRN. Assess weight daily. Assess food choices, intake, and I&Os after each meal/snack, PRN.

Interventions (In priority order):

1. Administer insulin subq as ordered.
2. Administer PO hypoglycemic medications as ordered (glyburide, metformin)
3. Provide a balanced diet that is low in sugar, fat, sodium, and high in fiber throughout my time of care.
4. Assist PT with food tracking with the corresponding blood glucose levels during my time of care.
5. Teach how to measure blood glucose levels for home monitoring at each test and prior to discharge.
6. Teach the importance of blood glucose control to prevent long-term and short-term complications twice a shift, PRN.

Problem #2: Deficient knowledge r/t disease process and treatment.

Patient Goals:

1. PT will be able to demonstrate correct use and administration of insulin prior to discharge.

2. PT will be able to verbalize s/s of hyperglycemia, hypoglycemia, and what to do if those symptoms are experienced during my time of care.

Assessments:

- Assess PT's learning style once a shift. Assess current lifestyle choices and current dietary and exercises routines twice a shift during my time of care, PRN. Assess PT's support system and motivation to comply with treatment guidelines once a shift, PRN.

Interventions (In priority order):

1. If PT is insulin dependent, teach the important of rotating injection sites QID and PRN.
2. Involve support persons/caregivers/family members in teaching when possible, during my time of care.
3. Teach to recognize the s/s of hyperglycemia & hypoglycemia daily, PRN.
4. Teach prper timing of insulin administration, according to the specific insulin type as ordered during each insulin administration during my time of care.
5. Teach how to count carbohydrates for before all meals/snacks and how to read food labels during my time of care.
6. Refer to diabetic educator prior to discharge.

To Be Completed During the Simulation

Nursing Notes

Time	*I or E*	Notes	Specify NDx #
0800	E	DN is in the clinic, calm, alert, cooperative, with mother who reported DN has not been himself lately with a lack of energy & not wanting to play. Stated no fever to be evident. Mother mentioned DN has wet the ed the last couple of nights which is not normal for him. Mother reported DN has been snacking a lot more recently, his pants are fitting looser even though he is eating more. DN stated to gets up at night to get a drink of water and go to the bathroom. Stated that vision has been blurry sometimes. Mother reported he has been squinting when he is reading, scab on R knee from 2 weeks ago is present and appears not to be fully healed. No s/s of an infection.	1 2 3
0810	I	Informed MD of DN's s/s, mother's concerns, and wt. loss of about 8 lbs in the past 6 months.	1
0815	E	MD concerned about possible DM & requested urine dipstick.	1, 3
0830	E	Blood glucose level: 271. MD recommended admission to hospital to confirm DM diagnosis. DN appeared fearful, shook head no. DN's mother rubbed his back & stated she would stay at the hospital with him. Mother asked if DN would be given insulin. MD explained he would most likely be given insulin in the hospital to manage glucose levels. DN stated "I don't want to be in the hospital. DO I have to go?" MD said it was important to get BG under control so that DN could start feeling better.	1 2 3
1345	E	Admitted to the hospital, mother at bedside, DN playing on phone, did not make eye contact.	1, 2, 3

1400	I	Provided education about DM management & who would be involved in care during hospital admission. Encouraged to ask questions.	2 3
1405	E	Mother stated, “Insulin will help lower his blood sugar?”	2, 3
1408	I	Explained BG checking will happen frequently.	2
1410	E	Mother stated “this is all pretty overwhelming. There’s a lot to learn.”	2, 3
1413	I	Used therapeutic communication to validate feelings, assured mother nursing role is to educate & provide support.	3
1500	E	Blood glucose: 274	1
1505	I	Notified MD, taught purpose of insulin.	2
1545	E	“I don’t want a shot; do I have to get one?”	2, 3
1555	I	Explained how insulin is administered, administered 4 units of regular insulin.	1, 2
1600	E	Thanked after insulin administration, mother asked what A1C is	2
1615	I	Explained what A1C is and that all other labs are normal	2, 3
1700	E	DN told mother he is not hungry	1
1715	I	Taught the importance of having snacks between meals & at bedtime to help regulate sugars, provided a snack of 6 whole grain crackers with 2oz of cheddar cheese	1, 2
0700 *NEW DAY*	E	Laying in bed with mother at bedside, reported feeling a little bit better, fasting BG: 126 & has improved since yesterday. Mother asked about blood sugar testing differences	1, 2, 3
0710	I	Taught and explained fasting BG should be between 70-110	1, 2
0815	E	Call light alarm on, mother stated DN got tearful for no reason, is sweating, is irritable, and isn’t asking right. DN ate 10% of breakfast	1, 2, 3
0900	E	BG: 58	1
0910	I	Provided 4 oz of OJ	1
0935	E	BG: 82	1
1000	I	Provided snack, explained importance of having a simple carb fallowed by a complex carb	2
1020	E	DN stated “I feel a lot better.” Mother stated “That makes sense”	1, 2, 3
1030	I	Taught about different types of insulin, brought in supplies to teach about administration and to rotate injection sites	2
1045	E	“I should inject insulin at a 90-degree angle” Mother stated, “there is so much information.” Asked about insulin pen	2, 3
1055	I	Provided information about insulin pen and to store at room temperature once opened	2
1110	E	Mother asked about what an insulin pump is	2
1115	I	Taught about what an insulin pump is & to change the needle q 2 days	2
1120	E	Head nodding during explanation, asked what to do if/when DN gets sick	2
1125	I	Taught to check blood sugar q 3 hr & to increase fluids when ill	1, 2
1130	E	DN & mother nodded head stated, “okay, we will do that.”	2, 3
0800 *NEW DAY*	E	DN stated, “I miss seeing my friends.” Mother asked about DN playing	2, 3

		sports	
0815	I	Taught about DM & exercise	2, 1
0820	E	Stated “I should eat a complex carb before I exercise”	2, 1
0900 *NEW DAY*	E	AT clinic, scab on knee is mostly healed, DN stated “I feel better I guess.” Mother reported DN does not like to check sugar because he is embarrassed, and it hurts.	1, 2, 3
0930	I	Reviewed finger sticking procedure, encouraged to share feelings. Taught to wear a medical bracelet	2, 3
0945	E	Head nodding during teaching, stated will go to store to get medical bracelet	2

Initials/ Signature _JJ/ J. Jordan____

Actual Patient Problems & Goals

** This worksheet should be completed after you complete the ATI simulation.

Problem #1: Risk for unstable blood glucose levels

Patient Goals:

1. 1. PT’s blood glucose levels will remain between 70 to 130 during my time of care. - UNMET

2. PT will identify complex carbohydrates to include at mealtimes during my time of care. - MET

Problem #2: Deficient Knowledge

Patient Goals:

1. PT will be able to demonstrate correct use and administration of insulin prior to discharge. - MET

2. PT will be able to verbalize s/s of hyperglycemia, hypoglycemia, and what to do if those symptoms. - UNMET

Problem #3: Anxiety

Patient Goals:

1. DN will verbalize concerns of growing anxiety as they arise during my time of care – MET

2. DN will ask questions or seek clarification when anxiety increases. – MET

Problem #4: _____

Patient Goals:

1. _____ Met ☐ Unmet ☐
2. _____ Met ☐ Unmet ☐

Problem #5: _____

Patient Goals:

1. _____ Met ☐ Unmet ☐
2. _____ Met ☐ Unmet ☐

Patient Resources: Support groups for parents of DM children.

Patient Teaching: To check blood sugar every 3 hours when ill.

To Be Completed After the Simulation

The orange boxes should be filled out with your simulation patient's actual results, assessments, medications, and recommendations.

NCLEX IV *(7)*: Reduction of Risk

Actual Labs/ Diagnostics
- Positive for ketones in urine
- A1C: 12%
- BG: 274
- Fasting BG: 126

NCLEX II *(3)*: Health Promotion and Maintenance

Signs and Symptoms
- Delayed wound healing
- Increased hungry
- Increased thirst
- Increased urination
- Fatigue
- Blurred vision
- Wt. loss
- Irritable, tearful, diaphoretic (hypoglycemic episode)

NCLEX II *(3)*: Health Promotion and Maintenance

Contributing Risk Factors
- Does not really have any: exercises, is not over wt., no family history

Therapeutic Procedures

Non-surgical
Insulin
BG level checks
Hypoglycemic protocol

Surgical
N/A

NCLEX IV *(7)*: Reduction of Risk

Prevention of Complications
(Any complications associated with the client's disease process? If not what are some complications you anticipate)
- Hypo/hyperglycemia
- Delayed wound healing/infection
- Continued visual changes
- Impaired skin integrity
- Possible neuropathy
- Isolation, depression, anxiety

NCLEX IV *(6)*: Pharmacological and Parenteral Therapies

Medication Management
Insulin regular/NPH
Glucagon
Acetaminophen

NCLEX IV *(5)*: Basic Care and Comfort

Non-Pharmacologic Care Measures
Provide snacks
Therapeutic communication
Pt teaching
Having mother at bedside

NCLEX III *(4)*: Psychosocial/Holistic Care Needs

Stressors the client experienced?
Friends making fun of him
New DX
Not understanding DX
Feeling overwhelmed with new information
Hospitalization
Lifelong treatment/ Lifestyle changes

Client/Family Education

Document 3 teaching topics specific for this client.

- when to check BG when ill
- To wear a medical alert bracelet
- To follow a simple carb with a complex car

NCLEX I *(1)*: Safe and Effective Care Environment

Multidisciplinary Team Involvement

(Which other disciplines were involved in caring for this client?)

RN, MD, dietician, lab, pharmacy, clinic, family

Reflection Paper

Directions: Write a 1-page reflection paper for each patient using Times New Roman, 12 pt. font and double-spaced. Include the following:

1. Describe an “Aha” moment you experienced during this learning experience.
2. What were the most important aspects of this simulation and what did you learn?

3. How will this simulation experience impact your nursing practice?

Diabetes is becoming a more and more common disease as time goes on. I am sure that everyone knows at least one person who has diabetes regardless of if it is type one or type two. But nobody is really there when a diagnosis of diabetes is made or how a person might feel when that news is told to them. The scenario made it clear that diabetes can be and is an overwhelming diagnosis and requires multiple lifestyle changes and modifications. My younger sister has type one diabetes and was diagnosed when she was 8 years old, and I remember her going to the doctors and then up to A.I DuPont following the diagnosis. When she was 8, I was 10 so I didn't really understand what was going on besides the fact that her and my mom were away and the rest of us were going to go up and see her soon. An "Aha" moment I had during this experience was seeing what it must have been like for my mom and my sister when they were first told the news about the diagnosis. Even as a nursing student now, diabetes is still a lot of information and can be overwhelming for me to take in and understand all the aspects to it. But to have someone who does not have a medical background or previous experience, it truly is a lot to take in. An important aspect of this simulation was to pay attention to little details, like how his knee scrab from two weeks ago had not healed yet and to always be ready for questions. Noticing the scab on his knee was an indicator for delated wound healing that some may have been overlooked if not paying close attention to. Questions can be asked at any time, so it is important to be prepared and supportive at all times. I also learned that it is okay to not know the answer and to come back with more information and more accurate information. This simulation also showed me how to explain things in different ways. The teach back method is a very useful tool when assessing someone's knowledge or understanding of a topic so I will definitely be using that more in the future. It was also seen that diabetes is a really hard balancing act that will last a lifetime. Patient teaching and understanding is so important in preventing lifelong complications. The boy in this scenario is still young and has a whole life ahead of him, having his mom at the bedside and her being understanding and asking questions is a big deal. She will be taking the lead on his diabetes management until he gets a little older and can do it independently. I will be making sure that the support people/caregivers/family members are involved in care and understand treatments, management, and total care just as much as the patient

does. Having the family/support system/caregiver comfortable enough to ask questions is crucial in helping someone with a new diagnosis.