

ACTIVE LEARNING TEMPLATE: *System Disorder*

STUDENT NAME _____

DISORDER/DISEASE PROCESS **Diabetes Mellitus Management**

REVIEW MODULE CHAPTER **82**

Alterations in Health (Diagnosis)

- type 1 diabetes mellitus is an autoimmune dysfunction involving the destruction of beta cells
- type 2 diabetes mellitus is a

Pathophysiology Related to Client Problem

- Diabetes mellitus is significantly more prevalent in African American, American Indian, and Hispanic populations and is more common in men than women.

Health Promotion and Disease Prevention

- Diabetic screening
- exercise and good nutrition are necessary for preventing or controlling diabetes

ASSESSMENT

Risk Factors

- Metabolic syndrome
- Insulin resistance
- age

Expected Findings

- Hyperglycemia: Blood glucose level usually greater than 250 mg/dL
- Polydipsia: Excessive thirst due to dehydration
- Polyphagia: Excessive hunger and eating caused from inability of cells to receive glucose

Laboratory Tests

- Fasting blood glucose
- Oral glucose tolerance test
- Glycosylated hemoglobin (HbA1c)
- Urine ketones

Diagnostic Procedures

- Self-monitored blood glucose (SMBG)
- Insulin regimens

SAFETY CONSIDERATIONS

- Observe the client perform self-administration of insulin, and offer additional instruction as indicated
- Dosage can be adjusted when the client is scheduled for procedures that require fasting

PATIENT-CENTERED CARE

Nursing Care

- nurses should check the following
- Blood glucose levels and factors affecting levels (other medications)
- I&O and weight
- Skin integrity and healing status of any wounds for presence of

Medications

- insulin taking. (Rapid-acting insulin, Short-acting insulin, Intermediate-acting insulin, Long-acting insulin)
- Oral hypoglycemic
- Second-generation sulfonylureas
- Meglitinides
- Thiazolidinedione
- Alpha-glucosidase inhibitors
- Dipeptidyl peptidase-4 (DPP-4) inhibitors

Client Education

- Provide information regarding self-administration of insulin
- teach the client guidelines to follow in case of an illness
- foot care education
- educate the client on the proper

Therapeutic Procedures

- Ensure that the client follows the proper procedure for blood sample collection and use of a glucose meter. Supplemental short-acting insulin may be prescribed for elevated pre-meal glucose levels

Interprofessional Care

- Blood glucose monitoring
- Insulin training
- Medicines
- Reducing the risk of complications
- Healthy eating
- Activity and exercise
- Coping with stress and life

Complications

- Cardiovascular and cerebrovascular disease-
- Diabetic retinopathy
- Diabetic neuropathy
- Diabetic nephropathy