

Nursing Case Study: Diabetes

I. Introduction

This nursing case study focuses on a 55-year-old female patient admitted for uncontrolled Type 2 diabetes mellitus. The report demonstrates clinical assessment, nursing problem identification, care planning, and evaluation of outcomes based on evidence-based practice. The aim is to show how nursing interventions can help stabilize blood glucose levels and support long-term self-management.

2. Patient Description

- **Name:** Mrs. L. (pseudonym for confidentiality)
- **Age:** 55 years
- **Gender:** Female
- **Marital Status:** Married
- **Occupation:** Office administrator
- **Living Situation:** Resides with spouse; two adult children living independently
- **Medical History:** Diagnosed with Type 2 diabetes 10 years ago, hypertension, and obesity (BMI 32)
- **Lifestyle Factors:** Sedentary routine, irregular meal patterns, limited physical activity, reports high stress due to work demand.

3. Clinical Presentation

Mrs. L. presented to the clinic with fatigue, frequent urination, blurred vision, and unexplained weight loss over the past month. She admitted to skipping doses of metformin and following a high-carbohydrate diet. Vital signs included:

- **Temperature:** 36.8°C
- **Heart rate:** 98 beats per minute
- **Blood pressure:** 150/90 mmHg
- **Blood glucose:** 298 mg/dL (random test)
- **BMI:** 32 kg/m²
- Skin assessment revealed mild dryness, and the patient reported tingling in both feet.

4. Patient Assessment

Assessment was completed through interview, observation, and lab evaluation. HbA1c measured 9.4%, confirming poor long-term glycemic control. Urinalysis showed glucose and trace ketones. The nurse identified signs of neuropathy and discussed the patient's diet, medication use, and daily habits. Emotional assessment showed frustration and guilt regarding her condition, revealing a need for patient education and support.

5. Nursing Diagnoses / Problems

1. Imbalanced blood glucose levels related to inconsistent medication use and diet nonadherence
2. Knowledge deficit regarding diabetes self-management and nutrition
3. Risk for peripheral neuropathy progression related to chronic hyperglycemia
4. Risk for infection related to impaired circulation and delayed healing
5. Ineffective coping related to stress and lifestyle imbalance

6. Nursing Care Plan

Goal 1: Achieve stable blood glucose within target range (80–130 mg/dL fasting)

- Administer prescribed antidiabetic medications on time.
- Monitor capillary glucose before meals and at bedtime.
- Reinforce the importance of consistent medication use.

Goal 2: Improve understanding of diabetes management

- Provide teaching on meal planning using the plate method.
- Encourage daily physical activity such as short walks.
- Discuss the role of regular glucose checks and follow-ups.

Goal 3: Reduce risk of complications

- Assess feet daily for cuts, redness, or numbness.
- Educate on proper foot hygiene and appropriate footwear.
- Promote fluid intake and balanced diet to prevent infection.

Goal 4: Enhance coping and motivation

- Offer emotional support and reassurance during education sessions.
- Encourage goal setting for diet and exercise routines.
- Refer to a diabetes support group for ongoing peer encouragement.

7. Implementation and Documentation

All interventions were implemented as planned. The nurse monitored glucose levels throughout the shift and ensured medications were administered correctly. Education was given using printed materials and demonstration techniques. The patient participated actively in discussions and created a personal meal plan with guidance. Documentation included glucose readings, dietary notes, and the patient's verbal understanding of instructions.

8. Evaluation

After four days of inpatient care, fasting blood glucose dropped to 145 mg/dL. The patient expressed confidence in using a glucose monitor and preparing healthy meals. She demonstrated proper foot inspection technique and verbalized the importance of routine checkups. While long-term control requires continued follow-up, short-term nursing goals were met successfully.

9. Ethical Considerations

The nurse maintained confidentiality by using pseudonyms and securing documentation. Informed consent was obtained before procedures and education sessions. Respect for patient autonomy guided all care decisions, allowing Mrs. L. to participate in setting her health goals.

10. Reflection

This case underscored how education and consistency shape diabetes outcomes. Medication adherence alone is not enough without dietary awareness and lifestyle change. The experience reinforced the nurse's role as both a caregiver and an educator, emphasizing patient motivation as the foundation for sustainable management.