**Impact of Precision Nursing Management Based on Continuous Glucose Monitoring on Hypoglycemic Events in Hospitalized Diabetes Patients**

**Objective:**

To evaluate the effect of precision nursing management based on continuous glucose monitoring (CGM) in hospitalized patients with diabetes, and to assess its impact on hypoglycemia incidence and glycemic variability.

**Methods:**

A total of 100 diabetic patients admitted to the Department of Endocrinology between January and May 2024 and undergoing CGM were randomly assigned to either a control group (n = 50), receiving standard nursing care, or an experimental group (n = 50), which received precision nursing interventions based on real-time CGM data. These interventions included real-time glycemic trend analysis, personalized dietary and exercise guidance, insulin regimen optimization, and alerts for nocturnal hypoglycemia. All participants wore CGM devices for 7 consecutive days. Outcome measures included the incidence of Level 1 (3.0–3.9 mmol/L) and Level 2 (<3.0 mmol/L) hypoglycemia, nocturnal hypoglycemia, time in range (TIR), time below range (TBR), time above range (TAR), and mean amplitude of glycemic excursions (MAGE).

**Results:**

The experimental group showed a significantly lower overall incidence of hypoglycemia compared to the control group (20.0% vs. 38.0%, P < 0.05). Nocturnal hypoglycemia occurred more frequently in the control group. Among patients with low fasting C-peptide levels, the incidence of hypoglycemia was significantly lower in the experimental group (31%) than in the control group (75%). The experimental group also demonstrated superior glycemic control, including lower mean blood glucose (7.68 vs. 8.14 mmol/L), higher TIR (85.68% vs. 69.58%), lower TBR (0.56% vs. 1.64%), lower TAR (12.04% vs. 23.68%), and reduced MAGE (3.48 vs. 4.88 mmol/L) (all P < 0.05).

**Conclusion:**

Continuous glucose monitoring (CGM)-based precision nursing effectively reduces the risk of hypoglycemia and improves glycemic stability in hospitalized diabetic patients through individualized, data-driven interventions.