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Evidence-Based Practice to Prevent and Treat Hypoglycemia in a Cardiovascular Inpatient Hospital

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Abstract

Hypoglycemia is a significant safety concern that can affect clinical outcomes. It is the goal in glycemic management to maintain blood sugars within a narrow therapeutic range. Patient death or serious disability associated with hypoglycemia, while in a health care facility, is listed as a "never event" (US Department of Health & Human Services, 2006). The nurse's adherence to the hypoglycemic protocol in cardiovascular patients warranted further investigation. Adherence to a hypoglycemic protocol affords prompt action to appropriately treat low blood sugars and prevent a crisis situation. The nursing assessment should include capillary blood glucose test results, patient's level of consciousness, respiratory and circulatory status, existence of IV access, type, time, and amount of insulin given, last PO intake and nutritional status. Depending on the level of glucose and level of consciousness, several algorithms include treatment. This quantitative research, using a prospective causal-comparative design, investigated the effect of education on the nurse's adherence to the hypoglycemic protocol and the incidence of hypoglycemia at one cardiovascular hospital. This evidence-based practice supports patient safety. Quantitative methods were used for collection of naturally occurring data from January through April 2012, with the use of several instruments. Results. The research hypothesis was supported: education on the hypoglycemic protocol improved the nurse's adherence to the protocol and decreased the incidence of hypoglycemia in an inpatient population of cardiovascular patients. Several components that are central to a successful implementation of a program to improve glycemic control in the inpatient setting include development and implementation of interventions, including standardized order sets, protocols, policies, and algorithms with associated educational programs. Updating and educating team members on prevention and treatment of low blood sugar is a quality initiative that will improve safety by increased adherence to the hypoglycemic protocol. A similar quality improvement patient safety, project may be replicated in other populations and settings to increase patient safety.

Title:

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Keywords:

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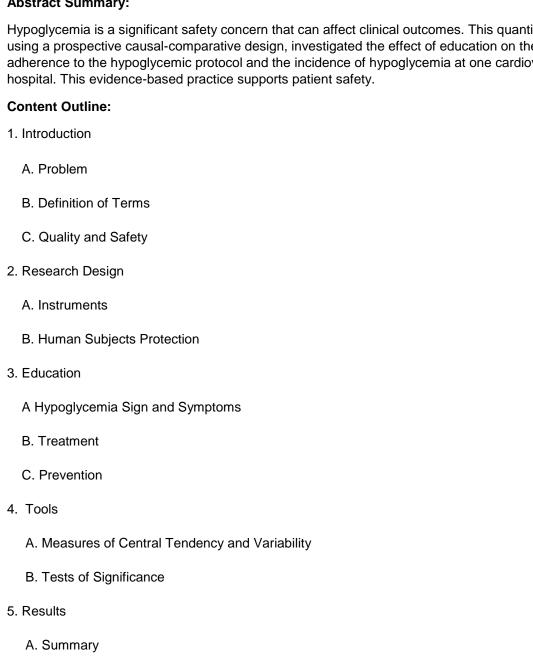
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Abstract Summary:

B. Overview

C. Discussion

Hypoglycemia is a significant safety concern that can affect clinical outcomes. This quantitative research, using a prospective causal-comparative design, investigated the effect of education on the nurse's adherence to the hypoglycemic protocol and the incidence of hypoglycemia at one cardiovascular



D. Implications

6. Conclusions

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Professional Experience: Professional Experience. Expertise specific to this educational activity Present Instructor/ Educator Chamberlain University, College of Nursing Baccalaureate Program 2009-2013 Diabetes Cardiovascular Nurse Educator. St Vincent Heart Center of Indiana 1998-2008 Registered Nurse Cleveland Clinic

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