Thermoregulation in the Golden Hour: Prevention of Hypothermia following Preterm Birth

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On my honor, I pledge that I have neither given nor received any unauthorized assistance on this paper. April 11, 2023
Background and Purpose: Hypothermia in the first hour following preterm birth is associated with increased morbidity and mortality. Strategies to prevent hypothermia following delivery are varied among institutions as well as the knowledge surrounding thermoregulation of preterm infants. The purpose of this quality improvement project was to utilize a bundled approach to thermoregulation following delivery to reduce rates of hypothermia in infants less than or equal to thirty-two weeks gestation and increase knowledge of preterm thermoregulation among neonatal intensive care unit (NICU) nurses.

Methods: This project utilized a pre/post intervention design in which two measures were obtained. The first measure was a comparison of NICU admission temperatures of two independent groups of preterm infants before and after implementation of the thermoregulation bundle. The second measure was a pre-test and post-test knowledge assessment of nurses completed before and after education on thermoregulation.

Results: A total of eleven preterm infants were in the intervention group that received the thermoregulation bundle. The average temperature on admission was increased after using the bundle compared to the pre-intervention group. Sixty-six nurses were included in the thermoregulation education program, and all completed a pre and post assessment. A statistically significant improvement in knowledge was observed following the education session.

Conclusion: The results suggest that increasing thermoregulation knowledge of NICU nurses and utilizing a bundled approach to thermoregulation following preterm delivery reduce the incidence of hypothermia on admission.

Keywords: Thermoregulation, preterm, hypothermia, education, nurses