

Does Educating Labor and Delivery Staff About Sudden Unexpected Postnatal Collapse/ Sudden Infant Postnatal Collapse Reduce the Incidence of Sudden Unexpected Postnatal Collapse?

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Background

Background:

About 4 years ago at Inova Fairfax Women's Hospital on the Labor and Delivery Unit, a newborn who was deemed a healthy newborn and had no risk factors was found blue and unresponsive on their mother's chest roughly at 1 hour of life. It was later discovered that the newborn died due to sudden unexpected postnatal collapse/ sudden infant postnatal collapse.

Labor and Delivery (LDR) Registered nurses (RNs) were not aware that sudden unexpected postnatal collapse (SUPC) existed, were not responsible for assessing neonates for SUPC, and were not educating their patients about SUPC.

Purpose:

The purpose of this project is to determine if educating LDR RNs would increase their knowledge on SUPC and therefore decrease the incidence of SUPC.

Methods

Four articles were reviewed and appraised.

Becher, Bhushan, and Lyon define SUPC as both severe apparent life-threatening events and sudden infant death (SID) occurring <24 h, in infants where the postnatal adaption appears normal (10 minute apgar score >8).

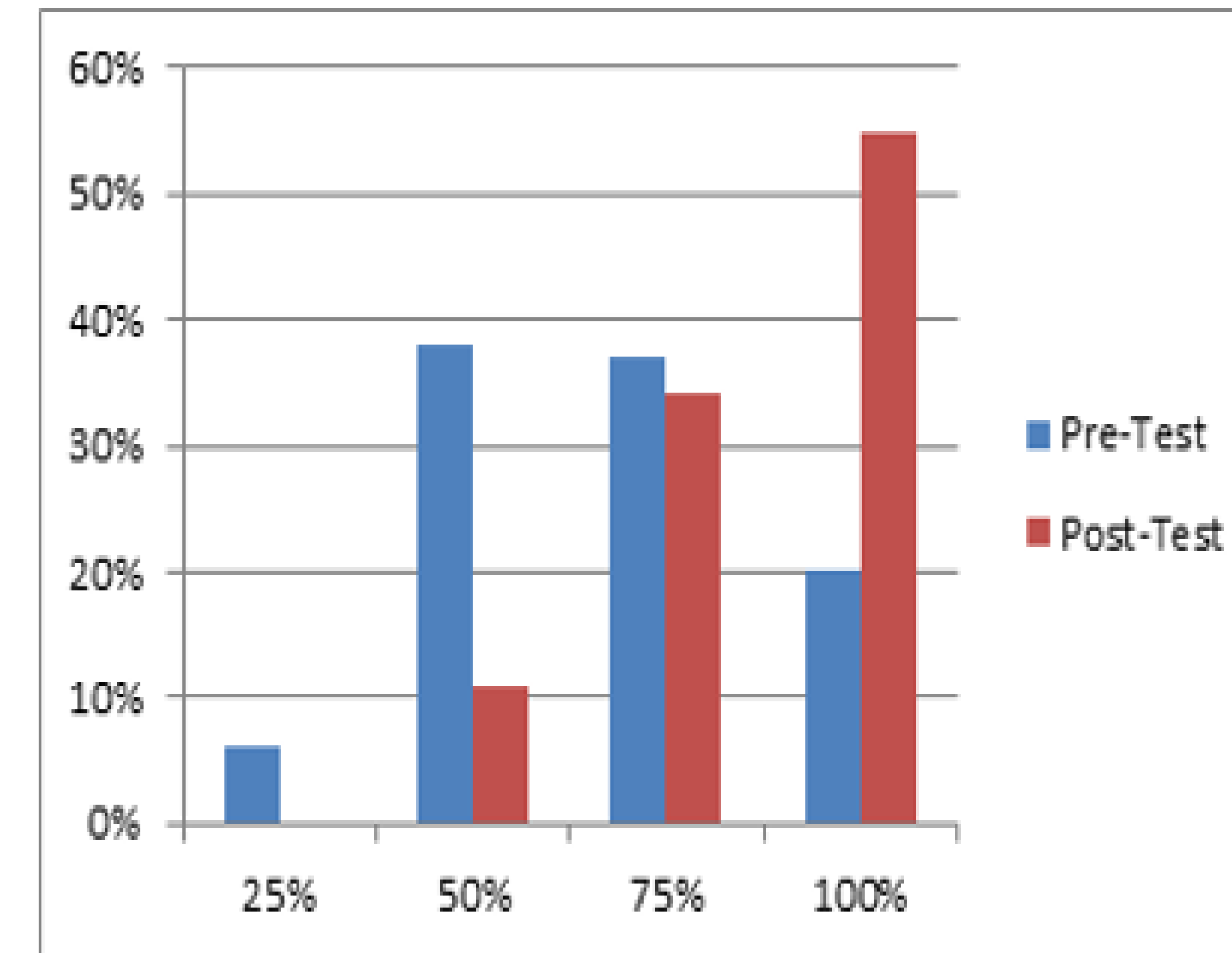
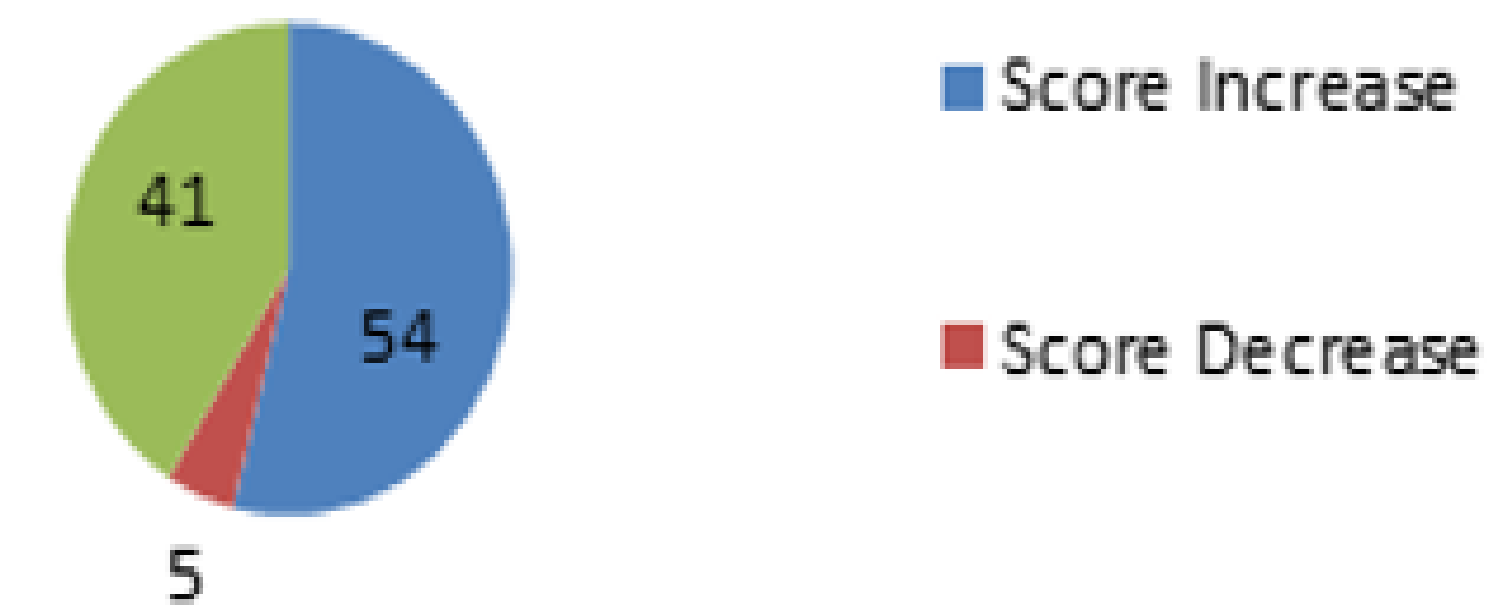
Davanzo, Cunto, Paviotti, Travan, Inglese, and Brovedani found that SUPC can cause death or permanent disability in neonates.

Ludinton-Hoe and Morgan believe that RNs should closely assist the mother and monitor the position and airway of the newborn to prevent SUPC.

Pejovic and Herlenius encourage RNs to use the RAPP tool (Respirations, Activity, Perfusion, Positioning) while assessing the newborn.

We used the evidence to create a pre-test, education session via PowerPoint, and a post-test to assess LDR RNs knowledge about SUPC.

Test Score Comparison Between the SUPC Pre-test and Post-test



Education Event Outline:

1. We distributed a four question pre-test on SUPC
2. Once completed, we presented information via PowerPoint on SUPC.

The PowerPoint included

- The definition of SUPC
- The incidence of SUPC
- The risk factors of SUPC
- Assessment tools
- What RNs can do to prevent SUPC

3. After the presentation, we distributed the exact same five question pre-test but called it a post-test.
4. Total scores were calculated and statistical analysis were made.

We required the RNs taking the test to provide their employee ID number. This allow us to compare the pre and post test for each individual completing the test

Pretest

1. What is your employee ID?
1. What does SUPC stand for?
 - A. Sudden uterine postpartum collapse
 - B. Sudden unexplained preterm contractions
 - C. Sudden unexpected postnatal collapse
3. Which of the following is not a symptom of SUPC?
 - A. Cyanosis
 - B. Weak cry
 - C. Pallor
 - D. Apnea
4. Which of the following situations would require an RN intervention to prevent SUPC?
 - A. PIH, AMA, natural vaginal delivery
 - B. Primip, obesity, bed sharing
 - C. Drug use, alcohol use, precipitous delivery
5. What can nurses do to prevent SUPC?
 - A. Assess baby's respirations, activity, perfusion, and positioning
 - B. Assess baby's temperature, heart rate, ability to breastfeed, and respirations
 - C. Assess baby's blood glucose, heart rate, respirations, and perfusion

Posttest

1. What is your employee ID?
2. What can nurses do to prevent SUPC?
 - A. Assess baby's respirations, activity, perfusion, and positioning
 - B. Assess baby's temperature, heart rate, ability to breastfeed, and respirations
 - C. Assess baby's glucose, heart rate, respirations, and perfusion
3. What does SUPC stand for?
 - A. Sudden uterine postpartum collapse
 - B. Sudden unexplained preterm contractions
 - C. Sudden unexpected postnatal collapse
4. Which of the following situations would require an RN intervention to prevent SUPC?
 - A. PIH, AMA, natural vaginal delivery
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5. Which of the following is not a symptom of SUPC?
 - A. Cyanosis
 - B. Weak Cry
 - C. Pallor
 - D. Apnea

Findings

After reviewing the results, we found that overall, the scores improved on the tests after the education session.

54% of the scores increased, 41% of the scores stayed the same, and 5% of the scores decreased

The results of the pretest were as follows:

- 5% of the RNs received a score of 25%
- 37% of the RNs received a score of 50%
- 35% of the RNs received a score of 75%
- 20% of the RNs received a score of 100%

The results of the posttest were as follows:

- 0% of the RNs received a score of 25%
- 10% of the RNs received a score of 50%
- 35% of the RNs received a score of 75%
- 55% of the RNs received a score of 100%

The findings of this EBP findings indicate that educating RNs on SUPC increases their knowledge on the subject and therefore can decrease the incidence of SUPC.

Implications for Practice

The findings of the EBP prove that educating RNs does in fact increase their knowledge on a particular topic. With this increased knowledge, a greater number of RNs will be aware of signs and symptoms in addition to educating their patients about SUPC thus preventing SUPC.

The findings of the EBP also open up the conversation of whether or not LDR RNs should be mandated to assess for SUPC during the recovery process. RNs leaders may need to consider developing a specific a flowsheet in EPIC where SUPC assessment can be made so that RNS are held accountable for SUPC assessments.

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Project Contact

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Specify if applicable. If not, use this section for study contact info.

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