Improving Nurse Management of the Second Stage of Labor
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BACKGROUND
- Rapid increase in cesarean section (CS) rates (20.7% in 1996, 32% in 2015) without decreases in maternal/neonatal morbidity/mortality
- Healthy People 2020 goal: 23.9% CS rate for low-risk nulliparous, term, singleton, vertex (NTSV) women
- Risk of adverse outcomes increases exponentially with each subsequent CS
  (Caughey et al., 2014; Caughey, 2017; Bell et al., 2017; Vadnais et al., 2017)

PURPOSE
To develop, implement, and evaluate an educational program to improve labor nurses’ management of the second stage of labor.

LITERATURE REVIEW
- A nurse’s attitude about birth and time spent at the bedside may influence birth mode (Edmonds et al., 2017)
- An absolute length of the 2nd stage of labor has not been identified (Caughey et al., 2014)
- If incremental fetal descent and/or rotation is made and maternal-fetal status warrant, second stage should continue for at least 4 hours in nullipara and 3 hours in multipara (Smith et al., 2016)

METHODS
✓ Obtained hospital and university IRB approval
✓ Created second stage guidelines
✓ Convenience sample of nurses attended instructional course (IC)
✓ Established knowledge through pre/post tests
✓ Validated nursing skills
✓ Data extracted from EMR

RESULTS
- Nursing knowledge increased
  • Mean pre- test score 6.17, mean post- test score 9.06, t (17) = -6.43, p < .001
  • Outcomes improved
    • Median number of normal spontaneous vaginal deliveries (NSVD) increased from 8.5 in pre-intervention sample to 11.5 in post-intervention sample

DISCUSSION
- Median duration of time from 10 cm to birth increased
- Significant increase in mean number of position changes in 3rd and 4th hours of 2nd stage of labor
- Improved nursing care

<table>
<thead>
<tr>
<th>RN</th>
<th>NSVD rate</th>
<th>CS rate</th>
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<tbody>
<tr>
<td>Attended IC</td>
<td>87.5%</td>
<td>6.2%</td>
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<tr>
<td>Did not attend IC</td>
<td>81.7%</td>
<td>9.1%</td>
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CONCLUSION
- Educational training sessions can promote practice changes and improve clinical outcomes
- Having current knowledge and skills motivated nurses to do more to affect delivery outcomes

QUESTIONS?
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